AMERICAN GAS ASSOCIATION MONTHLY

May 1928

Volume X

Number 5

What the Investment Banker Thinks of Gas
By A. C. ALLYN

The Laboratory and Its Significance
By W. R. HOPKINS

The Natural Gas Industry Centers at Dallas

Cooperation—A Sensible Sales Ally
By HERBERT H. SKINNER

A.G.A. Convention to Be at Atlantic City

New England Advertises Gas Cooperatively
By M. B. WEBBER

Announce Custom-Built Course in Selling Gas

Keeping the Customer's Good Will When He Receives A High Bill

By H. M. PACE



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Natural gas rates are included for the first time and these, with the manufactured gas rates, make the book the only complete and authoritative rate list in the industry. Improvements in typography have enabled the compilers of the information to give with clarity comprehensive data on rates in every city in the United States, the U. S. Possessions, Canada, Newfoundland, and Cuba.

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How Familiar Are You with The Story of Gas

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Thirty-five thousand copies of "The Story of Gas" are doing good work today! One company alone—the Consolidated Gas Co. of N. Y.—has purchased 7500 copies for general distribution among high school students!

Sample copies are free for the asking, and a reading of the booklet will convince you of its value.

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AMERICAN GAS ASSOCIATION MONTHLY 420 LEXINGTON AVENUE, NEW YORK, N. Y.

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VOLUME X

MAY, 1928

NUMBER 5

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May 7-10

the Natural Gas

Department Meets at

Dallas

A Valuable Program

A Large Exhibit

Ample Entertainment

May 7-10

are the dates

Will YOU be there

SUBSCRIPTION RATE

\$3.00 PER YEAR

For statements and opinions contained in papers and discussions appearing herein, the Association does not hold itself responsible.

Entered as Second Class Mail Matter at the Post Office at Brattleboro, Vermont, February 10th, 1922, under the Act of March 3, 1879.

Our Own Who's Who



XXXVI Henry C. Morris

Henry C. Morris

BORN at Detroit, Mich., in 1879. Was educated in public schools of that city, and entered gas industry in meter repair shop of Detroit City Gas Co. Promotions came steadily, and he was made meter shop foreman, then general foreman of street department, and later assistant superintendent of distribution. In 1902 he became assistant general manager of the gas company at Bay City, Mich. In 1909 he went to Dallas, Texas, as superintendent of construction and operations for the Dallas Gas Co. In 1912 he was made vice-president and general manager. In addition to this he is today vice-president in charge of operations of the Fort Worth Gas Co.

For a while Mr. Morris was interested in the Monroe, La., gas field developments, and had a large part in the assembling of 130,000 acres of leases at the Bastrop, La., field, and in organizing the Natural Gas Producing Co., U. S. Carbon Co., Morehouse Gas Co., and the Excelsion Pipe Line Co. of Louisina.

Has been active in promoting best interests in Dallas and of Texas, both in commercial and industrial lines as well as civic. Has been a member of the Executive Board of the A. G. A., and is now a manber of the Managing Committee of the Natural Gas Dept. Is chairman of the Arrangements Committee for the annual convention of the Department.

AMERICAN GAS ASSOCIATION MONTHLY

Vol. X

MAY. 1928

No. 5

A.G.A. Convention to be Held at Atlantic City

Tenth Annual Meeting Scheduled for October 8 to 12

THE tenth annual convention of the American Gas Association will be held at Atlantic City, N. J., with the world-famed Million Dollar Pier the center of the convention and exhibition activity.

The gas industry has at its disposal in the Million Dollar Pier ample facilities with which to care for every demand of space for convention purposes, together with other conveniences which go to make a successful meeting.

Announcement of the Pier as the meet-

ing place has been favorably received by the manufacturers who plan to exhibit. Ample space will be available for the exhibition, and it is fully expected that a greater amount of space will be used than in 1926, when the A. G. A. last met on the Pier and a total of 60,000 net sq.ft. of space was used.

The exhibition prospectus will be in the mails about May 15. Further announcements about the convention and exhibition will be given in future issues of the Monthly.



More than 5,000 gas men will meet here October 8 to 12

Johns Hopkins Will Graduate Eight Gas Engineers in June

IN an interesting pamphlet, "Trained Engineers Available to the Gas Industry," the Consolidated Gas Electric Light and Power Co. of Baltimore, Md., calls the industry's attention to the fact that in June, 1928, there will be graduated from Johns Hopkins University eight trained gas engineers.

Photographs and brief biographies of the graduates are given in the booklet. The purpose of the announcement is to call to the attention of gas company executives the fact that this year eight trained gas engineers are available for employment.

The men graduating are:

R. Carroll Albrecht, Leonard A. Covell, William P. Dittmar, Frank H. Dotterweich, Raymond Mathew Finn, Louis W. Herbst, Jr., Frank J. Maguire, Jr., Nathan Schofer.

Interviews with these men may be arranged through Johns Hopkins University, Baltimore, Md., either by addressing Dr. Wilbert J. Huff, Professor of Gas Engineering, or to the individual graduates.

In reporting on the Chair of Gas Engineering at the Southern Gas Association Convention, Dr. Huff said:

"The fourth year of this work is now drawing to a close. One notable event is the graduation of the first class. Eight men are candidates for the Degree of Bachelor in Engineering in Gas Engineering at the June, 1928, commencement at Johns Hopkins University. These men will then be available to the dustry and it is hoped that the services these and many others whom we confident expect will follow in the years to come will justify the splendid support which this Association and its friends have given.
"This fourth year has rounded out the full

"This fourth year has rounded out the full complement of classes in residence and has marked the maximum in attendance. The tabulated summary shows 30 undergraduate students, four graduate students, and 24 extension course students, or a total of 58 enrolled for instruction under the direction of the Department of Gas Engineering."

3500 Utility Companies Under Private Ownership

THE gas and electric branches of the great public utility industry account for more than 3500 companies under private ownership—an average of about 73 per state. The electric business has 19,975,000 customers and the gas business 14,778,000.

IN the article "Why Convention Attendance Is Important," by Col. M. W. Walsh, in the April issue of the MONTHLY, it was stated in error that James Linn led the singing at one of the first natural gas conventions. J. F. Parker is the man to whom this credit should have been given.





Two views of exceptionally interesting gas refrigeration exhibit recently staged by the Consolidated Gas Co. of New York

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The Natural Gas World Centers at Dallas

When the Natural Gas Department Meets There from May 7 to 10 for Its Annual Convention

VERYTHING is in readiness for the annual conntion of the Natural Gas Department of the A. G. A. at Dallas, Texas, May 7 to 10. A program containing papers of exceptional merit, an extensive exhibition of appliances and equipment, and entertainment that can be clas-



N. C. McGowen Chairman, Natural Gas Department

ment that can be classified only as "Dallas' own" is the bill of fare, and it is being predicted that more than 1000 natural gas men are going to be at Dallas to enjoy it.

The program of papers will be essentially the same as announced in the April issue of the Monthly, with the exception that Harrison P. George, of the Southern California Gas Co., Los Angeles, Calif., will give the paper "The History of Development and Problems of the Natural Gas Industry in California."

The title of the paper to be given by R. M. Conner, director of the American Gas Association Testing Laboratory, Cleveland, Ohio, has been announced as Improving the Use of Natural Gas." The invocation will be given by The Very Reverend Robert S. Chalmers, Dean, Saint Mathews Cathedral, Dallas, and the address of welcome will be by R. E. Burt, mayor of Dallas.

Among the questions to be discussed under the leadership of J. D. Creveling, New York, are: Customer ownership, what in your opinion is the best pipe joint for belt lines and low pressure lines in a city distribution system, and human values in the gas business.

Karl F. Griffith, of Dallas, will be



S. W. Meals Vice-Chairman, Natural Gas Department

toastmaster at the annual banquet of the Department the evening of May 9. Speakers scheduled are H. O. Caster, of H. L. Doherty & Co., of New York; J. J. Taylor, of the Dallas News, and Oscar H. Fogg, president of the A. G. A.

Indicative of the interest that natural gas

men all over the country are taking in the convention is the announcement from Pittsburgh, Pa., that a special car from Pittsburgh to Dallas has been reserved for delegates. This train will leave Pittsburgh at 5 P.M. (6 P.M. daylight saving time), May 5. Arthur Booth, Pittsburgh Supply Co., has charge of arrangements.

In the April issue of the Monthly there was a brief article by Col. M. W. Walsh, of Louisville, and in this issue is a letter from J. M. Garard, of Columbus. These two messages are of intense interest to members of the Natural Gas Department, as Col. Walsh and Mr. Garard have the distinct honor of having attended every natural gas convention for the past 23 years. Both are looking forward to the Dallas meeting as one of the most significant ever held, as it is the first since the Natural Gas Association of America became the Natural Gas Department of the American Gas Association.

It is evident that every member of the Department feels the same as Col. Walsh and Mr. Garard.

Official greetings to the delegates have been issued by the Dallas Chamber of Commerce, by E. R. Brown as president, and the City of Dallas, by R. E. Burt, mayor. These are as follows:



Christy Payne



Alex. Forward



O. H. Fogg



. W. G. Hagan



H. C. Cooper



F. M. Towl



H. P. George



R. W. Hendee



T. L. Phillips



P. McD. Biddison



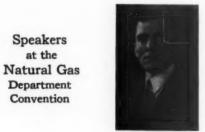
J. D. Creveling



R. M. Conner



J. B. Best



H. D. Hancock



E. O. Bennelt

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ARE YOU GOING TO DALLAS?

The Rest of the Industry Will Be There

A Record-Breaking Exhibition :: A Valuable and Interesting Program -and Real Entertainment

Annual Convention, Natural Gas Department Dallas, Texas, May 7 to 10

As Mayor of Dallas I want to extend a real Texas welcome with regard to the Natural Gas Department convention here in May. I hope all who see these lines are making preparations to attend. We like our progressive gas people down this way and we are anxious to meet more people of the same livewire type. Dallas feels greatly honored that our city has been given the first Texas gas convention of nation-wide scope and our city will not be backward in showing our appreciation.

"We have a population of more than 275,000 in our metropolitan area. This is a gas-using city and our many skyscrapers are not blackened by smoke. We offer much for diversion: Sixteen golf courses, thirty theaters, beautiful drives and other features of a well-rounded convention city that last year entertained some 350 conventions. Come down and take a look at Dallas and Texas, as well as enjoy the interesting programs of your convention and the entertainment features."

R. E. Burt, Mayor.

"The Dallas Chamber of Commerce wishes to join with local and Southwestern gas industries in most cordially and urgently inviting you to attend the convention of the Natural Gas

Department of the American Gas Association in Dallas, May 7-10. This is the first time a Texas city has been honored with a national convention in this field. The word "Texas" is of Indian origin and means "Friendly." Come down to the convention, bring your wife along, and we will show you that this word is no misnomer. Come and attend an interesting big convention, in the Nation's biggest State and have a big time."

E. R. Brown, Pres., Dallas Chamber of Commerce.

Dallas Must Be Free from Smoke during Convention



Miss Upshaw

THERE is only one smoking chimney in Dallas, Texas, and that must go before the big Natural Gas Convention in that city May 7-10. So says Miss Lois Upshaw, and she is the official cleaner of the skies in Dallas.

Miss Upshaw, advertising director of the Dallas Gas Company, has started a fight against the one remaining dirty

spot on her otherwise immaculate skyline. Through the efforts of this energetic cleaner

of the atmosphere, Dallas has come to be known as the smokeless city.

Just as some women get excited over a spot on the rug, Miss Upshaw gets into action when her skyline is threatened with anything impure, such as black smoke. No wisp of smoke can ooze into space and pollute the air when she is on the job.

One of the chief worries of this house-

keeper of the ozone is artists.

"They actually draw sketches of Dallas with black smoke coming out of the chimneys," she declared. "This is medieval. Dallas factories do not smoke, but artists say they must have balance in their pictures.

WHILE I have always been active and very much interested in the affairs of ne Natural Gas Association of America, and never failed to attend an annual convention, I am particularly anxious to be in Dallas May 7th to 10th, and expect this first meeting of the Natural Gas Department of the American Gas Association to be even bigger and better than any held by the former organization.

There has never been any doubt in my mind concerning the benefit that has resulted to the gas industry through the mem of these conventions in the past, and with the advantages that accrue to us now as a department of the American Gas Association, I anticipate greater accomplishments in the future.—J. M. GARARD, Vice-president, The Ohio Fuel Gas Co.

Miss Buchanan Wins Prize Offered by Southern Gas Ass'n



Miss Buchanan

THE Southern Gas
Association recently
awarded three prizes in
an essay contest. The
subject of the essay was
"If it's done by heat, you
can do it better with
Gas."

Edw. L. Rieha, of Baltimore, Md., J. H. Moore, of New York and Channing Cope, Director of the Georgia Utilities Information Bu-

reau, Atlanta, Ga., acted as the judges and made the following awards:

1st Prize—\$100 in cash or a trip to Jacksonville meeting, April 17-18-19, 1928—Won by Miss Oma Buchanan, Memphis Power and Light Co., Memphis, Tennessee.

2nd Prize—\$25 in cash—Won by Miss Janie Lou Beck, Georgia Power Company, Atlanta,

3rd Prize—\$15 in cash—Won by Mrs. Annie B. Smith, Tampa Gas Company, Tampa, Florida.

All of the essays submitted to the judges in this contest were favorably commented upon and showed rare ability in their preparation.

Southern Counties Has Booklet for Customers

THE Southern Counties Gas Co., Los Angeles, Calif., has recently issued for its customers an attractive booklet, entitled, "Getting the Best that Gas Can Give You."

Every phase of gas service is included, and particularly fine illustrations make the mesage clear. Reading the meter, adjusting burners, etc., are given, as well as general descriptions of all domestic gas appliances and an explanation of the testing of gas appliances as carried out at the A. G. A. Testing Laboratory at Cleveland, etc.

Carnegie Institute Has Free Employment Service

CARNEGIE INSTITUTE of Technology, Pittsburgh, Pa., offers a free employment service which is for use by all industries and individual companies. More than 60,000 former students are eligible for this service, and this year alone there will be about 370 students

graduating who can be reached through this service.

John D. Beatty, secretary, Bureau of Recommendations, Carnegie Institute of Technology, is in charge of this work and letters should be addressed to him.

Sales Analysis Booklet Can Be Had Free of Charge

A BOOKLET entitled "Sales Analysis" heen issued by the Metropolitan Life surance Co. The material is the findings of recent survey of business research methods now used in New England.

Copies of "Sales Analysis" will be sent to those interested if they will address the Metropolitan Life Insurance Co., 1 Madison Ave., New York, N. Y.

Peoples Company Claims Group Insurance Record

THE world's record for employee participation in the group insurance plan belongs to The Peoples Gas Light and Coke Co., Chicago, Ill., according to a recent announcement in the Peoples Gas Club News.

Of all employees eligible to participate in an additional insurance opportunity recently offered, 97.4 per cent have taken advantage of



Aerial pictures are not unusual these days, but here is one that shows the new holder of the Tampa Gas Co. An arrow on the crown points to Tampa's new air port

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What the Investment Banker Thinks of Gas

Suggesting That He Holds the Industry in High Regard Because of Definite Performance

By A. C. ALLYN
President, A. C. Allyn and Company

WILL endeavor to give you some idea of how the investment banker regards public utility industry in general and e gas industry in particular.

The gas business seems to me like some great hero who has been endowed with many natural qualities but is constantly encountering obstacles which must be surmounted and overcome.

Going back over a hundred years to the beginning of this industry, we find its early development was retarded somewhat due mainly to ignorance on the part of the public, wasteful practices where natural gas was used and the reluctance on the part of investors to put money into a rather precarious industry.

When it had at last gained recognition, the electric light was invented and it was commonly conceded the gas business would soon be entirely supplanted by electricity. But instead of a death knell, what was really sounded was the liberating paean of a new industry. For gas was to be reborn for new and glorious triumphs in a world so different from that of the nineteenth century that few of those pioneer gas men would recognize the child of their day.

The investment banker is vitally intersted in operating costs, plant equipment and in any new discovery or invention you can make to produce your service more efficiently and more economically at less cost to the public and greater earnings to your stockholders. Further, we realize that if you do not have the good will of your consumers, your business is going to suffer and when profits decline, the investment banker begins to worry because you are not fulfilling another obligation namely, your duty to the investor.

The investment banker is well satisfied that the best securities he has had to offer his clients during the past ten years have been those of well-managed, well-regulated gas and electric companies. And his judgment in this matter has been borne out by the insurance companies, the most painstaking and discriminating investors of today and by banks and other large depositories of money.

Many of us have been with these industries from the beginning, speaking in many cases a language unintelligible to the older banker of early railroad years. We are dealing with industries that have been regulated, almost from their inception, by State Commissions and are supposed, therefore, to have avoided the mistakes made by the railroads in their pioneer days.

We are told that it will require very probably \$2,000,000,000 to take care of the new business of the gas companies during the next ten years. Where so much is required to take care of expansion and improvement, it is very important that the industry be in a position to take advantage at all times of the changes in money rates. I think that too much praise cannot be given to the utility industry for the manner in which it has worked during the past ten years to increase the efficiency of its operations so as to be in a position at all times to raise capital to take care of its needs.

A comparative study of operating efficiency of railroads, utilities and industrials shows a remarkable record in favor of utilities. There was a time during the readjustment period, you might call it, when the gas industry had been pushed aside by electricity and was busy trying to find its proper place, when bonds of gas companies lagged somewhat and sold

Delivered before the Pennsylvania Gas Association at York, Pennsylvania, on April 11.

on a basis even below industrial bonds. With the proper development of the industry, however, the bonds of these companies have advanced very rapidly and the obligations of the better companies are now selling on a basis equal to those of the best electric light and power companies.

Some gas companies have shown a remarkable record since their incorporation and have been outstanding examples of stability and earning power. One of interest and close to home is the Pennsylvania Gas and Electric Company which is an outgrowth of the York Gas Company, one of the oldest companies in the country and one which has paid dividends for 77 years. We sold the five per cent bonds of this company recently on a basis comparable to any light and power company of equal earning power.

It is quite natural at times of high interest rates for companies to be financed with short term bonds and notes. When, on the other hand, interest rates are low, financing seems to run to long term bonds and stock. The efficient operation of utility companies was especially evident, therefore, during the year 1927 when they were able to strengthen their capital structures considerably by taking advantage of the low interest rates by refunding both long and short term bonds with long term bonds at lower interest rates and also by considerable stock financing.

The amount of money raised by stock showed a 35 per cent increase over 1926.

The important part played by the investment banker in the growth and expansion of your companies is best shown when we learn that for the first ten months of 1927, total issues of new securities of all sorts, stocks, bonds and notes, representing both new and refunding capital emitted by public utility companien the United States, aggregated ov \$2,216,000,000. This represents an increase of 32 per cent over the preceding year.

Of greater significance, however, and emphasizing very strongly where the utilities stand in the minds of the investing public today is the fact that out of a grand total of over \$8,000,000,000 securities of all sorts including corporation, foreign government, farm loan and municipal issues, issued during this period, public utility securities constituted more than 27 per cent.

It has fallen to the lot of the investment banker to educate to a great extent the investing public on the soundness of the utility industry. Taking for granted the investment banker must first establish his reputation not alone for integrity and honesty but also for his ability to judge correctly the soundness of the securities he buys for resale, he must necessarily do a great deal of this educational

(Continued on page 312)





How the gas companies of Metropolitan New York told the story of gas at the recent "Own Your Own Home" show

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New England Advertises Gas Cooperatively

Comprehensive Publicity Program Financed by Gas and Appliance Manufacturers is Now Under Way

By M. B. WEBBER
Governor, Sales Division, New England Gas Association

TO promote a new interest in gas, spread the faith in gas companies, and stimulate a more general appreciation is the wonderful things accomplished by nanufacturers of gas appliances, there is now under way in New England an aggressive publicity campaign.

That the time is ripe for such a campaign, not alone in New England but elsewhere, is not to be disputed. According to the survey conducted in 1927 by Crossly, Inc., for the American Gas Association, the gas industry as a whole "stands convicted of having failed to sell itself in the fullest measure to the American

people."

The subject was more discussed than any other at the annual convention in February of the New England Gas Association. In all discussions there was clearly a unanimity of sentiment in favor of a program of cooperative advertising designed to effect a greater consumption of gas through increased sales of appliances. Apparently it was the consensus of opinion that sustained publicity is today as necessary in the gas industry as in any

other, and that cooperative effort is

peculiarly essential from the nature of the

business.

The program which was at that time under consideration, and which was afterwards adopted and is now being carried out, calls for the expenditure within a year of \$165,000—the gas companies to subscribe \$125,000 and the appliance manufacturers \$40,000. Of the 70 members of the New England Association 68 have subscribed the apportionment for the gas companies, and about 85 per cent of the manufacturers of gas appliances sold in New England have subscribed the allotment for their group. The gas companies are to contribute to the campaign

123/4 cents per meter per year. The contribution of the appliance manufacturers is to be one per cent on the net billing of appliances purchased during 1928 by the subscribing gas companies.

The inception of the present campaign was an informal conference in December of about 25 major executives of the gas companies. They selected the following Publicity Conference Committee:

C. D. Williams, N. E. manager, National Refrigerating Company, Chairman.

F. L. Ball, vice-president, C. H. Tenney & Company.

F. D. Cadwallader, vice-president, Boston Consolidated Gas Company.

D. M. DeBard, general sales manager, Stone & Webster, Inc.

Alexander Macomber, consulting engineer and director, Portland Gas Company.

M. B. Webber, governor sales division, New England Gas Association.

This committee presented a definite program to a second conference held a few weeks later at the Boston Chamber of Commerce, attended by gas company executives representing nearly 1,000,000 meters, and by representatives of leading appliance manufacturers. This conference was designated "The New England Gas Association Publicity Conference," and with G. Warren Stiles, President of the New England Gas Association, as chairman, will convene from time to time during the year to consider the progress of the campaign.

The Publicity Committee will work in accord with the following Advisory Committee:

David Daly, *Chairman*; E. V. Alley, A. M. Barnes, G. E. Dustin, E. E. Eysenbach, F. H. Golding, and P. F. O'Keefe.

The functions of the Publicity Committee will also include cooperation with



The New England Publicity Conference Committee. Top: M. B. Webber and F. D. Cadwallader. Center: C. D. Williams, A. E. Greenleaf, and F. L. Ball. Bottom: D. M. DeBard and Alexander Macomber

a Merchandising Committee, which will assist in coordinating the publicity program with the merchandising plans of local gas companies. The Merchandising Committee is made up as follows: J. J. Quinn, *Chairman*; Cyrus Barnes, G. T. Fisher, William Gould, Allyn Haigh, J. J. McKearin, and R. B. Wright.

The Publicity Committee will coordinate also with an Appliance Manufacturers Committee consisting of: M. E. Abbott, *Chairman*; J. W. Geddes, A. A. Higgins, H. P. Halvorsen, T. H. Piser, and R. D. Walker.

The year's publicity program comprehends the use of 90 newspapers throughout New England over a period of nine months, together with certain radio broadcasting and such other supplementary advertising as may be warranted. Newspaper copy is prepared and the advertising

placed by the Greenleaf Company, advertising agents, Boston.

The campaign is in full swing. The first month's newspaper copy, a striking series of up-to-date advertisements of a more or less general character, has already appeared in the newspapers. The schedule as at present arranged includes, further, a sequence of specialized advertisements on water heating, refrigeration house heating, cooking, incineration laundering, etc. In conclusion there will be a series of advertisements of an editorial nature on "Gas For All Household Purposes."

To give continuity to the campaign and tie up each succeeding announcement with the ones previously published, there will be used in each advertisement the symbol of the "gas flame," together with a phrase to this effect:

"For the benefit of the people of New England a series of messages, of which this is one, is being published by the gas industry of New England. They contain interesting information about GAS—THE BETTER FUEL—and its importance in your home."

The campaign opened with this announcement:

"Gas is rapidly becoming the fuel of the nation. During the past twenty-five years while the population of the United States has increased fifty per cent, the sale of manufactured gas has increased seven times as fast, or 352 per cent. For more than a century the gas industry has gone ahead quietly and steadily—inventing, perfecting, and producing. Today it is realized more than ever that gas offers many conveniences to our health, comfort, and well being, not alone in the home but in all industrial and commercial fields as well.

"In the majority of American homes gas is performing services that spell the difference between toil and comfort,—confinement and leisure. More and more are recognized the unsurpassed facilities that gas offers for cooking, water heating, house heating, incineration, and refrigeration. Gas has been found to be a fuel entirely free from inconveniences—clean, always available, adequate, requiring a minimum of attention, no storage or handling.

"The gas industry is highly appreciative of its obligations to serve you in every way pos-

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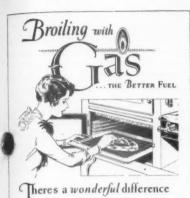
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GAN-THE BETTER PLIL -- quick our cleaners and most convenient to

ALTHORITIES agree that benifed foods are better. And there is no better way on broad than with GAS—THE BETTER FUEL.

Seeds, thops, fish, bacon or han-burger—ore more morrecoon—raste bester when broaded as the seed of the s

a quick searing close to the even lame holds the pures. Then con-

broating.
Call no your local gas company for demanastrations of cooking water bracing, between bracing, refrageration ancivoreison and many other uses for GAS – This DETTER FL41.







New ENGLAND'S breakfast is only a master of a few misures with a gas range. The quick, user best of the top burners for coreals, eggs, coffee and roast—or for a more substantial breakfast—sitive you as extra half hour of feep.

For good, convenience, cleanliness and dependability—or do-1—10 miles of the condition of the conditi

Call on your gas company for demonstrations of cooking, water heating, house heating, refrigeration, incineration and many other uses for GAS - THE BETTER PUR.



FOR COOKING!

IT is quick and clean, always available and can be depended up-on to work for you while you are free for other duties.

other duties.

Call on your local gas company for demonstrations of cooking, water heating, house heating, refrigeration, incineration and many other uses for GAS—THE BETTER FUEL.

For the boads of the people of New England a series of messages, of which this is one, is hading published by the go industry of New England. They contain interesting information about GAS—THE SETTER FULL—and its importance in your home.

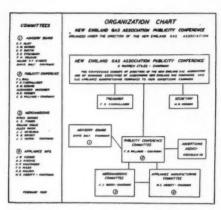
Advertisements to appear in New England newspapers



All is rapidly baseming the parameter of the nation. During the part to parameter of the United Branch or parameter of the United Branch or the parameter of the United Branch or the parameter of the United Branch or the parameter of the paramet



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Organization chart showing how New England advertising is being handled

sible. It maintains laboratories for the testing of processes and appliances that your interests may be safeguarded. It recommends the most efficient and economical equipment for the use of gas for whatever purpose you need it in your home.

"Call your local gas company for demonstrations of cooking, water heating, house heating, refrigeration, incineration, and other uses for GAS—THE BETTER FUEL."

The program for New England has been so planned as to be coordinated with any A. G. A. national program as and when started.

It is interesting to examine the machinery by means of which an apparently remarkable progress has been made in heading up and carrying through this campaign in the short space of time which has elapsed since its inception about three months ago. The organization chart indicates this machinery.

The business of the Publicity Conference Committee is to initiate first, layouts which are formulated by the agency, approved, and submitted to the Advisory Board for final approval as to policy and text. The Advisory Board is composed of five major executives of New England gas companies and representatives of two advertising agencies. Upon their approval the copy is immediately passed back to the advertising agency who then prepare electrotypes and advance proofs and forward

such matter to every participating member with quotations on extra proofs for direct-by-mail tie in, easelstands for window display, stickers for each type of mailing piece used by the member company during the month, and decalcomanias for use on windows and doors. At this point the activities of the Merchandising Committee manifest themselves.

The job of the Merchandising Committee is to see that every sales executive of each participating gas company utilizes the suggestions formulated for local tierins to the end that all possible coordination in each locality be secured, agreeable to the newspaper campaign scheduled for that particular month.

There is an additional body which is not shown on the organization chart to be known as the Board of Supervisors, or a Speakers Bureau, whose business it is to circulate in the section to which each member is accredited for the purpose of checking up the activity of the member company with a view to seeing that the cooperation recommended is actually carried out, and with a view to delivering sales talks and so-called "pep" talks not only on the carrying on of the campaign, but also on the devices which are being campaigned. The appliance manufacturing tie-in with the Publicity Committee and the Merchandising Committee has been formed for the purpose of keeping in touch with the viewpoints of the manufacturers and securing their cooperation.

THE Industrial Gas Series booklets of the American Gas Association have proved to be extremely valuable, as is seen in the figures showing that 18,000 of the five books have been sold.

Following is a list of the books, with the

number sold to date.	Copies
House Heating (two editions)	
Combustion (two editions)	
Bakeries, Hotels, and Restaurants.	
Food Products	
Steam Boilers	2000

These books sell for \$1.50 to members of the A. G. A.

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Cutting Cost of Main Laying in Paved Streets

Boring Machine Developed by Niagara Falls Company Saves Time, Money, and Trouble

> By CHARLES F. HENDERSON Niagara Falls Gas & Electric Light Co., Niagara Falls, N. Y.



Machine in trench

N the Spring of 1927 an extensive main laying program was planned for Niagara Falls. Due to the fact that this is a well-paved city with a small percentage of the population served by gas, it was decided to lay mains in the parking to avoid pavement as much as possible. With this proceedure it would only be necessary to cross pavement with services which were on the opposite side of the street from the main, or

only to cross paved intersections with

In order to lay pipe without breaking pavement a man-power machine was developed to bore under paved streets, sidewalks, and driveways.

The machine used is an assemblage of gears and shafting so arranged that by turning two cranks above the surface of the ground, a drive shaft with auger attached is revolved in the bottom of the trench. The augers used are made of light material, such as boiler flue, three to four feet long, with two cutting edges. A part is cut away on two sides for accessibility in cleaning the borings from the auger. Augers are made in three, five, seven, nine and eleven inch diameters.

In boring the larger holes a three-inch hole is first bored and then reamed to the desired size. Augers larger than three inches have a point made of three-inch boiler flue welded on the cutting end which acts as a pilot, thus insuring as straight a hole as the three-inch hole was.

It has been found next to impossible to bore a straight hole with a desired grade when using the larger augers without first making the three-inch pilot hole. This appears to be due to the fact that after boring under the paving for 15 or 20 feet, the drive pipe sags and causes the auger to go upward, giving a trapped hole. It is possible to bore a straight hole to grade with a three-inch auger because the guides on the drive pipe, being so near the diameter of the three-inch auger, keep the drive pipe from sagging.

The machine has a gear ratio of 2½ to 1. With two men on the cranks considerable power is given to the auger. However, soil conditions have been encountered where it was necessary to turn the larger augers with a ratchet while reaming the three-inch hole.

The speed of the auger when two men are on the cranks is about 16 revolutions



car lines, and sidewalk



Boring under 50 feet of brick paving, two Machine in operation to tie new main to existing main in street



Where 3-in. hole, 80 ft. long was bored in front of fire department station

per minute, which would be impossible with a ratchet arrangement. To bore under a pavement requires a trench as long as the space to be bored. The bottom of the trench should be seven inches deeper than the center line of the proposed hole, and should also be graded in the same direction as it is intended to grade the hole.

In the bottom of the trench $2'' \times 10''$ oak boards are placed, end to end, for the machine to run on. The boards have a row of one-inch holes down the center line spaced six inches apart, and a few extra holes off-center at each end, the extra holes to be used for pinning the boards down to the bottom of the trench.

The auger is forced in and out when boring by a one-inch bar five feet long used through the eye-bolt in the rear of the machine. The bar, after passing through the eye-bolt and then into the one-inch holes in the boards, gives the required leverage.

Two-inch standard pipes are used for the drive pipe, made up of 10-foot sections, using as many as is necessary for the length of the bore. At the center of each of these 10-foot sections a piece of three-inch boiler flue is welded. The three-inch boiler flue is drawn down at each end so that the two-inch pipe just slips through it. This makes it possible to push or to pull the auger and to drive pipe in and out of the hole with ease. If only pipe couplings were used on the drive pipe, a certain amount of soil would be pulled out or pushed in, delaying the operation by so much friction.

The machine requires five men to operate it; one to clear the borings from the drill, one to keep the machine upright, one to force the drill in and out of the hole when the drill becomes full of borings, and two to turn the handles.

The machine cannot be used in some localities due to the rocky condition of the soil. Cases have been found also where a sewer or water trench under the pavement had been filled with crushe stone, and it was necessary to open a small hole in the pavement to remove a stone or other obstructions before the bore could be completed.

The City of Niagara Falls repairs all pavement cuts made by the public utilities or others engaged in construction work and charges \$7.50 per yard for brick pavement and \$5.00 for asphalt, all trench being based on three-foot width.

The machine has created a most favorable impression with the city officials as it has eliminated the breaking of more than 100 streets which we have crossed, along with a considerable number of sidewalks and driveways.

A record of the first 70 boring jobs done (June to September, 1927, inclusive) gave the following information:

The total bored was 2,477 ft. of which 2,080 ft. were under pavement and 397 ft. were under sidewalks and driveways. Sixty-two of the 70 holes bored were three inches in diameter and were used for one and one-quarter or two-inch pipe.

On three-inch holes the drilling speed varies from 15 feet per hour on short bores to from eight to 10 feet on long bores. In reaming the time required is about equivalent to the time for the three-inch bore.

The longest hole bored was 81 feet. The actual cost of boring the 2,477 feet was \$827.50 for 1655 man hours. The average cost was 33½c per foot and does not include drayage or maintenance. However, neither of these two items warranted keeping a record of as they would not

(Continued on page 314)

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Program of Production Conference Announced

Second Annual Meeting Scheduled for Rochester, N. Y., May 22, 23, and 24

THE Hotel Seneca, Rochester, N. Y., is to be the headquarters for the Second Annual Production Conference of the Carbonization, Chemical, and Warr Gas Committees on May 22, 23, and 24. An attendance of more than 300 is expected.

The program that has been arranged is of universal interest. Important topics of the present-day are to be discussed by authoritative speakers, and in addition there will be open forum discussions at which any member may bring up problems.

All are urged to make their reservations direct with the hotel.

Members desiring to attend are reminded that there are many interesting installations at Rochester. Among them are: Coke dry quenching plant, a crude light oil silica-gel motor fuel plant, the only direct producer gas cooler that also saturates the air blast, a battery of sixty Becker ovens especially equipped to prevent smoke, a condensing and scrubbing plant designed to eliminate tar extractors or precipitators and produce Arcadian sulphate, and a liquid purification plant of the sulphur precipitation type.

The program is as follows:

Tuesday A.M., May 22 (Carbonization Committee Subjects) Greetings, by R. M. Searle, president, Rochester Gas and Electric Corp.

Welcome, by Alexander Forward, managing director, A. G. A.

Some Interesting Features of the Koppers Vertical Oven Installation at Sterling, Ill., by L. G. Adams, Illinois Northern Utilities Co.

Review of Carbonizing Plant Tests, by Prof. J. T. Ward, M. I. T.

Economics of the Ammonia Situation, by F. D. Lohr, Seaboard By-Product Coke Co.

Tuesday P.M., May 22 (Water Gas Committee Subjects) Opening Remarks, by W. J. Murdock, Coal Products Mfg. Co. Symposium on the Use of Bituminous Coal as Generator Fuel for the Production of Water Gas and Blue Gas, by A. McIntyre, Public Service Co. of Northern Illinois.

Results of Checkerbrick Tests-Univ. of Illinois, by Prof. C. W. Parmelee.

Automatic Clinkering and Charging Machines, by H. B. Young, Chicago By-Product Coke Co.

Measurement of Gas in Large Volumes, by M. E. Benesh, The Peoples Gas Light and Coke Co.

Wednesday A.M., May 23 (Chemical Committee Subjects)

Opening Remarks, by E. C. Uhlig, The Brooklyn Union Gas Co.

Record Control Apparatus, by E. C. Uhlig. Experience in Application of Pacific Coast Method of Oil Efficiency Determination, by L. J. Willien, Byllesby Engineering and Management Corp.

Control of Water Content of Coal Tar, by A. R. Belyea, Consolidated Gas Co. of N. Y. Naphthalene Scrubbing, by C. A. Lunn, Con-

solidated Gas Co. of N. Y.
Recent Developments in Liquid Purification
and Sulphur Utilization, by F. W. Sperr, The
Koppers Co.

Wednesday P.M., May 23
(Carbonization Committee Subjects)
Introduction, H. H. Himsworth, Consolidated Gas Co. of N. Y.

Production of Coke, Oven Capacity, Competing Fuels, Etc.—Statistical, by Paul Ryan, A. G. A. Statistician.

Desirable Characteristics for Various Uses: a. Chemical, by J. D. Davis, Bureau of Mines; b. Physical, by H. M. Chapman, Hudson Valley Coke and Products Corp.

Coke Preparation and Storage, by L. E. Knowlton, Providence Gas Co.

Coke Merchandising, by R. C. Edmunds, Utica Gas and Electric Co.

Coke Sampling, by H. J. Rose, and C. C. Russell, The Koppers Co.
Mixed Gas Research—Progress Report, by

Mixed Gas Research—Progress Report, by R. M. Conner, director, A. G. A. Testing Laboratory.

Open Forum.

Thursday A.M., May 24
(Water Gas Committee Subjects)
Treatment of Gas Plant Wastes, by E. J.
Murphy, The Brooklyn Union Gas Co.
(Continued on page 312)

United States Leads the World in Gas Consumption

WITH the exception of four Continental countries and the Orient, for which figures are not immediately available, the principal countries of the world use annually one trillion cubic feet of manufactured gas.

Last year, according to A. Gordon King, service engineer of the A. G. A., the United States alone used half this quantity of manufactured gas and, in addition, one and one-third trillion cubic feet of natural gas.

New Competitor for Ice

THE gas refrigerator, though a little slow in starting, promises a strong finish in the race between the ice man, the electric light company, solid carbon dioxide, and the gas man. The result may easily be greater business for all these who offer refrigeration for sale, for it is well known that the electric refrigerator has so served to awaken interest in refrigeration as to increase the ice business.

Solid carbon dioxide promises its most active competition in special fields, and the gas refrigerator claims lower first costs, cheaper up-keep, the advantage of no moving parts, and the possibility of installation in rural districts and elsewhere far removed from electric service and city gas.

Some gas-fired refrigerators operate on acetylene gas for example. Whereas the electric refrigerators operate on sulphur dioxide or some other compressible gas, and the ice plants refrigerate with ammonia, another compressible gas, these gas-fired refrigerators generally use ammonia in water, though other easily absorbed gases have been employed. The gas burner vaporizes the ammonia, which takes up the heat from food chamber. Ammonia is then cooled

with running water, is reabsorbed in a chemical medium, and is ready to make the round again. Large gas-fired refrigerators have already proved their worth in meat markets and other installations of considerable size.

The household gas refrigerator is just being brought more forcefully before us, and there is even talk of adapting it to long-distance transportation.—Nation's Business Magazine.

The Blue Star Home Wins Interest at St. Louis Show

A BLUE STAR all-gas home featured the recent St. Louis Builders' Show. A model five-room brick bungalow was erected on the floor of the large coliseum. A leading furniture company furnished the home with high-class, attractive furnishings and The Laclede Gas Light Company equipped the home completely with gas appliances.

A large electric Blue Star sign flashed the message of the Blue Star home to the thousands who nightly thronged the coliseum. In the living room of the bungalow a gas fireplace lent an air of cozy comfort, while in the kitchen a gas refrigerator and gas range spoke eloquently of the convenience and efficiency brought to the modern home by these two gas appliances.

Adjacent to the model bungalow was erected a room corresponding to the architect's plans for the basement. Here were exhibited a gasheating unit, a gas laundry dryer and stove, an incinerator, water heater and gas-heated washer and ironer.

Some sixty thousand people attended the Builders' Show, and according to J. J. Burns, of The Laclede Gas Light Company, the all-gas home was the center of interest and evoked many favorable comments from the thousands of home owners and prospective home owners.





Scenes at the St. Louis Builders' Show

Make the Unprofitable Customer Profitable

A Square Deal is the Simple Solution to What Has Been Considered a Knotty Problem

> By C. S. REED Rate Consultant, American Gas Association

OST classifications of unprofitable customers separate them into two general groups: First, the permanent resident, who uses so little of the service hat the revenue derived from him is not sufficient to place him in the profitable class: second, the seasonal customer. I am going to take the liberty of adding another class, the poor customer who has a real need for gas but cannot afford to use much because of its high cost. While in some companies which have a decidedly seasonal load, the seasonal customer may be of greatest importance, in most companies the poor man and the man of moderate means present the real problem.

The man of moderate means wants to use gas. This can be proved easily by examining the books of a natural gas company with a fairly low rate, for you will find that only about ten per cent of the customers use less than 4000 cu.ft. of high B.t.u. gas each month, as compared to 90 per cent of the customers who come in this class as regards most manufactured gas companies. The man of moderate means is the man who has the most use for gas. He stays at home more. He has a larger family than the average. More and bigger meals are necessary. Laundry work is done at home. Meals are taken at home instead of at the club. He generally lives in a small home where heat and hot water are not furnished by the landlord.

The problem of increasing the company's revenue from this class of customer is not solved by intensive sales effort by the new business department. As long as the gas company is operating on a straight meter rate, the customer of this type cannot afford to use his gas appliances even after the salesman has persuaded him to buy them. An analysis of

costs will show that a customer who uses gas for all of the ordinary domestic purposes will consume from 3000-7000 cu.ft. of gas a month and that the company makes an excessive profit on the investment used in serving such a customer. Sometimes the rate of return is as high as 50 per cent instead of the usual eight per cent that is generally considered a fair return. We are handicapping our new business representatives when we ask them to get business on such an excessive profit basis in the face of the competition of other fuels.

The minimum bill as generally used does not solve the question. It helps by making some customers partially pay their way, but it is not very effective as a business getter. A minimum bill of one dollar per month is about equal to a service charge of ten cents a month as a revenue producer.

Optional rates are not the solution. The customer we want to reach is using only from 500 to 2000 cu.ft. of gas each month and an optional rate will not help him or make a profitable customer out of him. As long as you are serving 30 to 50 per cent of your customers at a loss, you must figure this loss as an excess profit in your optional schedule, and when you do so you make the rate too high to meet competition.

There seems to be left only the service charge or its equivalent. It has been said that for some strange reason, when the word "service charge" is mentioned to utility executives, a look of horror is immediately noticed on their countenances. As said at Atlantic City, it is easier to sell a two-dollar service charge to the crankiest customer on the mains of the company than it is to sell a twenty-five

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Burns, e allvoked sands wners. cent service charge to the officials of that company.

Now why it this? Here are three answers: 1. Most service charges were installed as increases in the total revenue of the company. Each came as an added charge for which the customer received nothing additional and he therefore resented it. The form of the rate received all of the blame for every increase in bill.

2. Few real attempts have actually been made to sell the service charge by offering it, along with a greatly reduced meter rate, as an even trade on the present revenue of the company. 3. Those who try to sell the service charge talk only from the company's point of view, telling how it costs a certain sum to handle each account and look after each customer—so much per meter per month for this, for that, and for the other thing.

Now it is all very well to know your costs, and you should know them, but when you talk to John Smith, ordinary citizen, forget these costs. John Smith has troubles of his own, so why should he worry about those of the gas company? In fact, since misery loves company, John Smith is quite pleased to think a big corporation also has troubles. You must approach the average citizen from the viewpoint of his own pocketbook in order to interest him.

As a definite example, let us suppose we are considering a case of a company with 100,000 domestic customers who are using 3,000,000,000 cu.ft. of gas a year at a rate of, say, \$1.20 a thousand. That means an average sale of 30,000 cu.ft. per year per customer or 2500 cu.ft. per month. The average monthly bill is therefore 2500 × \$1.20 or \$3,00 a month.

Our problem is to determine the best way to raise \$3.00 from the sale of 2500 cu.ft, of ms.

If we use a straight meter rate, it is, of course, \$1.20 per thousand. If we swing to the opposite extreme and use a flat monthly sum, we have a rate of \$3.00 a month, regardless of the quantity of gas used. If we compromise and use a service charge of, say, \$1.00 per month, we will have left \$2.00 to be raised as a gas charge, or 80 cents a thousand. If we go still further and increase the service charge to \$1.50, we will have left only \$1.50 to be raised as a gas charge, or 60 cents a thousand.

Thus we have four rates, each of which, on present sales, means the same to the gas company. Which is best for the customer? Before deciding, suppose we try these rates on a number of customers and see how the monthly bills are affected.

The first column in the table shows the consumption in cubic feet per month of several representative customers. The second column shows the bill under a straight meter rate of \$1.20 per thousand. The third column shows the bills on the flat rate of \$3.00 per month. The fourth and fifth columns show the bills with the two service charge rates.

Which rate would you, as a customer, choose as best for your community?

Which rate tends to strangle the gas business by charging for the commodity and giving away the service? Which rate will cut down sales, drive away large customers, and result in increased costs and higher ultimate rates to the small customers originally benefited? Naturally number one!

Gas Used By Customer in cu.ft. per Month		Gas Bill on	Various Rates	
	\$1.20 per M cu.ft.	\$3.00 per Month	\$1.00 per Month plus 80c per M	\$1.50 per Month plus 60c per M
500	\$.60	\$3.00	\$1.40	\$1.80
1,000	1.20	3.00	1.80	2.10 2.70
2,000	2.40	3.00	2.60	2.70
2,500	3.00	3.00	3.00	3.00
3,000	3.60	3.00	3.40	3.30
4,000	4.80	3.00	4.20	3.00 3.30 3.90
5,000	6.00	3.00	3.00 3.40 4.20 5.00	4.50
7,000	8.40	3.00	6.60	4.50 5.70
10,000	12.00	3.00	9.00	7.50

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Which rate, apparently ideal for the customers, would encourage the use or waste of gas to such an extent that the plant and mains of the company would be swamped and poor service result? The flat rate, number two!

Which rate would encourage the use of gas, but would at the same time discourage waste? Which rate would tend toward lower future rates by stimulating les and putting gas on a competitive asis with other fuels? Which rate would help eliminate bill complaints by making winter and summer bills more uniform?

And, if we look at the matter from the standpoint of the customer alone, we can not help but pick number three or four as being best for the community. The only objection against choosing number four would be that the company would be afraid of selling too much gas on the 60-cent meter rate.

THE UNPROFITABLE CUSTOMER AUTOMAT-ICALLY BECOMES A PROFITABLE ONE

Thus you will note that, by forgetting the question of profit and loss and considering the question from the viewpoint of the customer, we automatically eliminate the unprofitable customer by making a good customer out of him. We eliminate the unprofitable customer by giving him a square deal and a chance to use more of our product at a price within the limit of his pocketbook. The service charge type of rate is the best rate for the small customer, because it is the only type of rate which gives him a chance to grow into a larger customer. It is the only type of rate which enables the man of moderate means to relieve his wife of the burden of dirty coal and ashes in the kitchen and to make his home as clean as that of his well-to-do neighbor.

So that the answer to the question of how can the unprofitable customer be made profitable is merely, "give the unprofitable customer a square deal."



Arthur Hewitt, general manager of the Consumer's Gas Co. of Toronto, cuts the silk ribbon at the opening of the company's first branch store

National Safety Council Offers Resuscitation Medals

HEROES who resuscitate persons overcome by gas, carbon monoxide, electrical shock, or drowning, will be awarded what is to be known as the President's Medal by the National Safety Council, which is endeavoring to induce more people to master the simple principles of the prone pressure method of resuscitation.

The only persons not eligible to receive the Safety Council medal are those who are awarded similar recognition by the American Gas Association or the National Electric Light Association. The A. G. A. award is the McCarter Medal. The N. E. L. A. presents the Insull Medal.

Old Proceedings Offered Free of Charge by J. M. Robb

INDIVIDUALS, companies, or libraries desiring to secure copies of old proceedings, etc., will be interested in the recent offer of J. M. Robb, 1513 Columbia Terrace, Peoria, Ill.

Mr. Robb is anxious to know of any need for the following:

Proceedings of American Gas Light Ass'n meetings. Complete, except for Vol. 16, 1899. Bound volumes of *Progressive Age*, for 1903, 1904, 1905, and 1906.

First volume of Proceedings of Illinois Gas Ass'n, and some miscellaneous volumes of the Western and Ohio Gas Light Ass'ns.

Mr. Robb is offering these free, to anyone paying the carrying charges.

Retires After 50 Years' Service with Gas Company



P. F. Roohan

PATRICK F. ROO-HAN, resident manager, Saratoga District, New York Power and Light Corp., was honored recently when the employee organization of the company tendered him a dinner. The occasion was his retirement after 50 years' active service with the company.

Mr. Roohan was honored by the presence of every member of his or-

ganization, as well as many invited guests, including members of the city administration, prominent associates, and officials of the company.

The following letter from Charles S. Ruffner, president of the company, was read:

"Mr. Roohan is justified in being proud of his record. Such gratification is a reward which can be earned only by sustained integrity and faithfulness. In paying public tribute to such a record, we are not only according recognition to merit, but we are recognizing the example to encourage younger men who are starting on their careers to deserve, likewise, the approbation and respect of their associates and of their community."

Mr. Roohan's service with the company began on March 7th, 1878, when he entered the employ of the Saratoga Gas Company as it was then known. This was at the age of 16 when he entered the service as clerk, and later went to the gas plant for practical experience in operation. With the exception of six years thus spent, Mr. Roohan has held executive positions and for a time, during the early days of consolidation, was superintendent of the company's properties at Ballston, Watervliet, Oneida, and Glens Falls, as well as Saratoga Springs.

Not only Mr. Roohan, but his father and other members of the family were for many years associated with the company. His father, whose record dated back to the beginning of the company, served a period of 47 years and his four sons continued to emulate his record. His son, James, Jr., who died in 1923, served 42 years; another son, John, 18 years, and a third son, William, 12 years. These, in addition to P. F. Roohan's service of 50 years, gives father and four sons a total period of 169 years.

In addition to Mr. Roohan's prominence in company affairs, he has served the community

in many offices of responsibility and trust, which included that of receiver of taxes and fire commissioner. He also served as a member of the Board of Education, as President of the Business Men's Association; was formerly treasurer of the Chamber of Commerce, a director of the Saratoga National Bank and a member of the Board of Managers of the Saratoga Hospital.

Mr. Roohan is a native of Saratoga Springs where he was born February 25th, 1862, and he has lived in that city all his life.

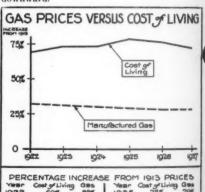
Gas and Living Costs Compare

HOUSEHOLD consumers throughout the United States now are buying artificial gas for light and heat at a price level which is nearer to the prewar standard than that of other necessities which go to make up the general cost of living.

This is shown by a study of prices charged for artificial gas in all principal cities in the quantity in which it is purchased by household consumers. The study was made by the U. S. Department of Labor which constructed a series of index numbers showing fluctuations in gas prices for the United States as a whole. In some cities, prices are higher than the average computed by the Department. In others, they are lower. The Department's data, therefore, show the price trend for the country as a whole.

In 1927 gas sold at an average price, which was 28 per cent above the 1913 price, while the general cost of living showed an advance of 72 per cent above prewar, according to the official data.

The price of gas declined from 1922 to 1927 while the cost of living increased from 1922 to 1925. From 1925 to 1927 living costs turned downward.



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Announce Custom-Built Course in Selling Gas

And Gas Appliances Under Auspices of the American Gas Association; Will Start in the Fall of 1928

THE American Gas Association announces a new service designed to aid in the greater sale of domestic gas.

Trangements have just been completed or the Business Training Corporation of New York City, to prepare and conduct a salesmen's training course in selling domestic gas appliances, based upon a comprehensive field survey of selling methods in the industry.

The various committees of the Commercial Section, in particular, have devoted much time and study to the problem of increasing the domestic consumption of gas. It has been generally agreed that among the several steps necessary to increase sales, definite methods of providing effective training for salesmen is an important factor.

After a series of meetings on the subject, attended by sales managers and other active commercial men, a sound, practical program for the preparation and conducting of a salesmen's training course was finally worked out. This program, after full consideration, was adopted by the Managing Committee of the Commercial Section at a recent meeting and has since been approved by the Executive Board.

The training course is being designed for retail sales people and other employees of gas companies who contact and deal with domestic customers. The work of organizing and preparing the course has already begun, and the course will be ready for use shortly after the Convention in October.

In order that the course shall be complete, practical, and based upon experience, a thorough field survey of retail selling methods in the gas industry is being made.

First, trained investigators will shop in large and small cities in various parts of

the country, visiting every type of utility store to find out how gas and gas appliances are actually being sold. They will prepare exact reports of what they find.

Second, skilled investigators will obtain directly from utility store salespeople detailed information as to the best methods they have found to greet and handle customers, to interest customers in gas and gas appliances, to meet objections and handle difficulties, and to close sales. These investigators will also accompany outside salesmen to study the best ways of getting and handling sales interviews in the home.

Third, experienced specialists will consult with sales and merchandising managers of gas companies, talking frankly with them about their problems and gathering the merchandising ideas and methods found most practical and profitable.

The field investigation will be made by a professional staff who have been doing this work for other industries. It will be national in scope, and will be continued until complete and authoritative sales information has been gathered.

The survey will bring a wealth of valuable, usable information representing the combined experience and judgment of the industry from all sections of the country which will provide the basis for the subject-matter of the course. Because the course will be based largely upon this information, the Association cannot present complete details as to its contents at this time. The important thing is that the course will deal entirely with practical selling problems of sales-people who deal with domestic gas customers. The "pep" and inspirational preachments will be omitted. Instead, the material will represent the best selling experience of the entire gas industry.

The work of conducting the field sur-(Continued on page 288)



Editoria1



The G. P. A.

THE hand that rocks the cradle is the hand that decides the destines of many manufacturers and merchants," asserts an advertising agency in connection with a current display. We are not so sure that there are so many cradles rocking as there used to be or that "hands" decide business destinies; we rather think it is heads or hearts. However, we get the drift.

The Little Woman, General Purchasing Agent, spends forty billion dollars annually. She decides how and where the income of twenty-five million households shall be expended. The agency tells of it in this way:

"Their decisions are governed by the welfare of their families. 'Is this breakfast food better for my children to eat?' 'Will this davenport and these curtains, this lamp and this piano, make my home a pleasanter place to be?' ... 'Will this school give my daughter what I know she needs?' ... 'Would another kind of heating equipment make our home more comfortable, more healthful next winter?' These are samples of the questions they ask."

How are the answers to these questions determined by The Little Woman? We have as an industry to offer her the most dependable, economical, adaptable, and efficient product for every purpose for which heat is used in her home. Does she know it? We have a half-score separate uses for gas! Does she know it? We have the safest, most efficient, and most serviceable appliances in the history of gas usage. Does she know it? Have we made it as easy for her to purchase gas appliances and use gas as to purchase and use any other household necessity and comfort?

The gas company furnishing the service and the manufacturing company producing the appliance, through every agency internal and external and through every official and every employee informing and convincing the General Purchasing Agent of the comfort, convenience, luxury, and indispensability of gas service, is, while building for itself, performing a valuable service in the civilization of the time.

Eight Engineers

THE wheels of progress turn, and those who have some small part in the process take pardonable pride and joy in watching. So leaders of the gas industry will watch the Commencement exercises at Johns Hopkins University in June with more than casual interest. It is significant and at the same time no small compliment to the gas course there that it would be impossible to list on this page the names of men helping to make the course possible.

Elsewhere in this issue of the MONTHLY is an article on the eight men who will enter the gas industry after graduation from Johns Hopkins in June with the degree of Bachelor of Engineering in Gas Engineering. These men have the sincere congratulations of the industry they have chosen to be their own, and there is little doubt that they will find their place in our great business.

And is not this one of the reasons for the progress of which we are so proud today? We have learned to value the trained man.

> By Alexander Forward, Managing Director.

The Sales Aspect of Industrial Business

A Careful Review of What Can Be Done and How It Worked Out for One Company

By F. C. HOFFMAN Sales Manager, Northern States Power Company, St. Paul, Minn.

THE author has given us a careful review of the subject of selling gas

for industrial heating purposes. He starts with the survey, and follows the problem through to the end.

This article is an abstract of a paper presented by Mr. Hoffman at the an-

nual sales and advertising conference of the Byllesby Engineering and Man-

agement Corp., at the Palmer House.

Chicago, recently.-Editor.

HILE the fundamentals of alesmanship are the ame in all lines, there is a different application of methods necessary in selling large quantities of gas—for the reason that processes are varied where large quantities are used. The class of

salesmen and methods of procedure that can be used to sell ranges and water heatars are a waste of time and money in the larger field. The application of gas to process work is a technical proposition and resolves itself down to cold facts—production and cost—with a possibility of cleanliness and dependability, where these show financial returns.

This is an age of big business, of quantity production, and it has been demonstrated that quantity production reduces unit costs. While it is true that in the gas and electric business the necessity for capacity to meet instant demand is a vital factor and is often forced by the rapid addition of large customers, thus adding to the capital investment—yet it would still appear to be good business to sell the commodity anywhere for any purpose if the company is properly compensated.

Of first importance in the sale of gas in large quantities is a survey of the locality as to the kinds of industries in the community served and whether heat is applied in their processes. Every industry should be listed, the nature of its various operations noted, also the kind and quantity of fuel, the cost and the quantity of production. Every open minded business man is interested in anything that will save him money—at least he is will-

ing to let you show him your picture and where there is no cost to him involved, the entry is less difficult.

Illustrative of the necessity of careful combing of industry for possible heat applications is our experience. At the outset of our industrial

gas development work it was thought that prospects were few as our community was more of a jobbing than manufacturing center. Our list of approximately 900 industrial and commercial customers shows the following: 503 hotels, restaurants and eating places; 78 machine shops, foundries, container manufacturers; 54 printers and engravers; 48 manufacturers of food products; 37 laundries and dry cleaners; 61 hat, shoe and clothing manufacturers; 97 bakers and confectioners; 22 miscellaneous industries.

Too often in the making of surveys the company representatives in their eagerness to find big things overlook the small ones. The present industrial business of the company was built up on small installations. In many of the largest plants now using gas, the smallest process was the first converted to show that gas really would do what was claimed for it.

The survey cards having been analyzed, it is necessary to establish a rate which must not only be profitable to the company but one that will get the business. We are dealing with a competitive fuel in industry, while in domestic use this factor is negligible. After the rate has been decided upon and the management convinced that this additional business will

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prove profitable, the personnel must be selected for this special selling job.

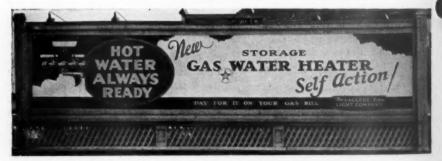
In large properties this is a comparatively easy problem. They have the men and the resources to educate. In the smaller properties the industrial gas development usually falls to the lot of the plant engineer or the merchandise salesman, if there be such. Neither of these men can do justice to the job. The merchandise salesman has no knowledge of manufacturing or distribution conditions, neither has he the knowledge of equipment available for heavy duty work. The plant engineer is usually too busy with his thousand and one duties to pay much attention. To obtain any large quantity of industrial business we must use men technically trained —because in this age of quantity production most industries have technical men in their employ or have available the services of consulting engineers in matters of plant operations. Guesswork has no place in modern industry. In addition to his technical training this man must have a certain amount of personality-or "IT." He must be able to talk the language of the man he is dealing with and in terms that are perfectly understandable—that is, he must talk baking to the baker, coffee roasting to the coffee roaster. It is demanded that he familiarize himself with a working knowledge of the particular process involved. His contact with the prospect will give a pretty good indication as to whether he will get the business or not. He should also be familiar with the various heavy duty appliances on the

market—at least those most commonly used. The lack of knowledge in many smaller properties is surprising. Just recently we had a call from one asking what a gas coffee urn was—another had sold a gas steam boiler for zinc melting.

Tell your prospect something about your business. It is often presumed that the other fellow knows as much about our business as we do-perhaps he does-but in most cases he doesn't; in fact his knowledge goes no further than his kitchen range and water heater. It will be news to him that other concerns are using gas advantageously. Show him there is equipment on the market built for his particular processes. Tell him what others are doing. If he sees money in sight, he'll soon show interest and put you in touch with the right party. As previously stated, here is the place to use all the diplomacy in your system. Get the confidence of this man and don't attempt to go further without it. Then take your time, look around and decide upon some particular piece of work that you know is successfully done elsewhere and sell your man on that. If he boosts it, you're on the up-grade; if he is not sold, you may go over his head to the boss, but the odds are against you.

In making the final survey, be sure to get all of the facts; then make your figures. If you are not sure of your deductions, call in the manufacturer's representative; he will willingly help. Unless you have a very favorable gas rate, you

(Continued on page 314)



Billboard advertisement of The Laclede Gas Light Co., St. Louis, Mo.

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The Laboratory and Its Significance

An Appreciation of the Service Gas Renders

By W. R. HOPKINS City Manager, Cleveland, Ohio

Mr. Hopkins gave these remarks at the laying of the cornerstone of the new Testing Laboratory.

AM tremendously interested in the thing you are celebrating today because this is the third important laboratory to be located in Cleveland. As you know the lamp works of the electrical industry is located at Nela Park; some of you know too that the Carbide and Carbon Chemicals Corporation have located here, so that in three great lines we have located in Cleveland now the highest technical skill.

Of course we are pleased to have you come here and recognize how natural it was for you to come under the circumstances. But there are other reasons that make Cleveland an advantageous location. We have here the Case School of Applied Science which carries advanced technical subjects notably in the steel line and makes its contribution by training men to these various lines.

Cleveland has always been interested in progress of every kind. Men of talent, men of ideals, men of zeal, have always had a sufficiently favorable hearing here; and if you know what is going on here now you can tell what will be going on in the rest of the country ten years from now. You are in a section where progress of any kind will receive hospitable attention. You are in a section where anybody who shows a disposition to do the right thing, anybody who has an idea of doing anything good, will get his just deserts more quickly. Gradually we are beginning to discover that everybody is working for one fellow and only one and that is, the ultimate user of his product. The laboratory, the company, the distributor, no matter who, there are those people who buy their product or do not. We are learning that the measure of success of any business is the quality of any business, the number of people who want to buy what they have for sale; and once we get that idea into our heads, one of our most serious difficulties, our labor difficulty, will be eliminated. Once labor understands the boss is another working man who is a servant of what they are both working for, we get rid of a lot of trouble. Prosperity, in fact escape from failure, lies along the line of an increased power to serve, months of service, the amplification of values in service. So today the Laboratory is more and more coming to be recognized as a really great business.

As Mr. Gallagher knows, we in Cleveland have special interest in improving the service of gas. We want to get rid of the dirt in this city, the dirt that comes from coal. I have been after Mr. Gallagher and his company for a long time to get the public to use gas in place of coal. This Laboratory is not the only one we expect to have working for Cleveland. Is this not a fact, that the business you make your living from contains something in addition to the satisfaction that you are rendering a great public servicethe progress is such that you may reasonably look forward to the satisfaction of having had some part in the methods of utilizing the products that you produced?

Personally, I think we have just entered on a wonderful period when every business can have its element of romance and where every business gets to its final objective, which means quality and the best service possible to the people who want its product and putting the product in such form and with such cost that every one who wants it can buy it.

For the present, we will take this Laboratory and thank you for it and express our hopes that you will not only expand and use this one but produce more later

Illinois Gas Course

Program is Announced

THE third short course in industrial gas engineering will open at the University of Illinois, Urbana, June 18. The need has been felt for a return to a stronger industrial gas course in the West, but house heating and hotel and restaurant work will in no sense be minimized. The course will provide excellent training for those men who sell gas for house heating and industrial purposes.

All are urged to make reservations with E. E. Lungren, Western United Gas & Electric Company, Aurora, Illinois, at the earliest possible moment.

The program includes the following:

What the Gas Sales Engineer Should Know about Combustion, by Dr. T. E. Layng.

Combustion Systems, by Dr. T. E. Layng. Principles of Furnace Design and Construction, by J. D. Keller.

General Principles of Metallurgy, by R. G. Guthrie.

Problems of Carburizing, Heat Treating, and Annealing, by R. G. Guthrie.

Problems of Forging and Rivet Heating, by Wm. M. Hepburn.

Burning of Common Brick and Refractory Brick, by Prof. R. K. Hursh.

Vitreous Enameling, by J. E. Hansen. Glass Melting, G. W. Akerlow.

Soft Metal Melting and Brass Melting, by C. J. Levey.

Problems of Drying and Japanning, by W.

A. Darrah. Temperature Control and Thermometry, by Dr. T. E. Layng.

Distribution Systems and Metering, by M. I. Mix.

Refrigeration and Volume Water Heating, by C. H. Light.

Problems in Food Products, by E. G. de Coriolis.

Advertising Industrial Gas, by J. F. Weedon.

Servicing Industrial Equipment, by W. F. Miller.

Hotel and Restaurant Selling, by Thos. Gallacher

House Heating Estimating, by G. C. Carna-

Hot Water and Steam Heating Systems, by Prof. W. H. Severns.

Warm Air Heating Systems, by Prof. Vin-

Insulation, by Dr. T. E. Layng.

Servicing Gas-Fired Heating Equipment, by H. B. Johns.

Selling House Heating, by L. C. Harvey.

There will also be a complete review, a visit to the warm-air research home, a questionbox period, and a final examination.

A. G. A. Helps Arson Law Enactment in Two States

UNDER the heading, "Model Arson Law Enacted," the April News Letter of the National Fire Prevention Association carries the following:

"The model arson law of our Fire Marshals Section has been passed by the States of Kentucky and South Carolina at the current sessions of their legislatures. Ten states passed this law last year and two already had satisfactory statutes. There are therefore fourteen in which we need make no further effort. (For what can be done under this law, see p. 4, News Letter No. 138, March 1928: The Model Arson Law in Tennessee.) The members who worked this year for our success in Kentucky and South Carolina were: American Electric Railway Association, American Gas Association, Nat. Ass'n of Credit Men, Nat. Ass'n of Dyers and Cleaners, Nat. Board of Fire Underwriters, International Ass'n of Fire Fighters, and Railway Fire Protection Ass'n."

A. W. Grant Dies

A. W. GRANT, Jr., died on Thursday, April 5th. He was born in 1887, at Norfolk, Va. He was a graduate of the Virginia Polytechnic Institute in the class of 1907, and of Cornell University in the class of 1909, mechanical engineering.

He served for two years with steel companies and the Baldwin Locomotive Works, principally in steam engineering work. He then served for five years with The United Gas Improvement Company, of Philadelphia, and for the last twelve years with The Koppers Company, of Pittsburgh.

THE following paragraph appeared in the "American Gas Light Journal" for January 16, 1872:

"A self-inflating life preserver has been devised in Belgium consisting of a belt containing carbonate of soda and tartaric acid so arranged that when the wearer falls into the water enough gas is generated to float him. The idea is said to have been suggested by a shipwrecked apothecary whose life was saved by circumstance of his having a box of Seidlitz powders in his pocket."

Gas-Operated Refrigerator Car Is Success

Ideal Fuel Makes Possible a New Method of Keeping Freight Cars at Low Temperature

AN iceless refrigerator car, the principle of which is based on the properties of a substance known as silica gel, is described in *The Rail*way Age. No source of mechanical power is required,

the operation being effected by heat from a stored gas supply. Several long-haul runs have been made with the first car equipped with this system, and results have been uniformly successful. A variety of commodities have been carried, including frozen fish, oranges, and canta-

loup. During a test run from New London, Conn., to Fort Worth, Tex., temperature observations were taken by means of several thermo-couples at various points in the car. The car was precooled to two degrees above zero before loading with fillet, and the temperature when loaded averaged 18 degrees F. The fillet was unloaded at a temperature of 14 degrees, having been in the car eleven days. Railway Age says:

"Silica gel is a hard, glassy material with the appearance of a clear quartz sand, and is chemically inert toward practically all substances. During the manufacture, the steps of the process are carefully controlled, so that the physical structure is extremely porous. The pores are so minute they can not be detected under a microscope. It has been determined that the voids constitute 41 per cent of its volume.

"The presence of these minute voids gives silica gel the ability to absorb relatively large





The refrigerator car and the refrigerating unit

quantities of vapors. As an example, a quantity of silica gel placed above water in a closed vessel will absorb, or take up, water vapor to the extent of 25 per cent of its own weight. If it is then removed from the vessel and activated by heating, the water va-

por will be driven out and the silica gel rendered capable of absorbing more vapor. This action is purely physical, and the cycle may be repeated indefinitely, with no alteration in structure, or decrease in absorptive power. It is this peculiar property which forms the basis of the operation of this iceless refrigerator car.

"The apparatus consists essentially of three main parts; namely, the ab-

parts; namely, the absorber (containing the silica gel), evaporator and condenser.

"The operating cycle of the apparatus may best be explained by reference to one of the drawings. Assuming that the silica gel in the absorber has been activated, it will absorb vapor from the refrigerant in the evaporator, causing a lowering of the temperature of the latter by the evaporation of the refrigerant.

"When the silica gel has become saturated with vapor, it is heated by means of a gasburner, and the refrigerant vapor is driven out of the silica gel, passing to the condenser where it is liquefied and returned to the evaporator by the float valve. When activation of the silica gel has been completed the source of heat is removed and, as soon as it has cooled sufficiently, the absorption phase begins automatically. In actual operation, the heating period is much shorter than the absorption period, and by dividing the absorber into two sections and heating these sections alternately, continuous refrigeration is produced. As actually constructed, the silica gel is contained in many tubes

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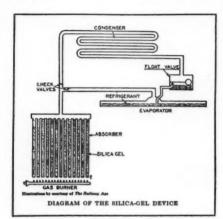
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of small diameter to effect a rapid heating and cooling.

"The arrangement of the apparatus as applied to the refrigerator car is shown in one of the drawings. The evaporator, consisting of a series of parallel pipes running longitudinally of the car, and connected to a transverse header, and containing liquid sulfur dioxide, is suspended close to the ceiling of the car.

"The operation of the system is effected entirely by lighting and extinguishing the burners alternately, and at the proper intervals. This is accomplished by a device operated by pressure obtained from the fuel. This device operates at a slow but definite speed, and admits gas to the burners for fixed periods and at definite intervals. The gas is ignited at the burners from a small pilot flame which burns continuously.

"For controlling the temperature in the car, a thermostat is used. When the car temperature falls to the point for which the thermostat has been set, the thermostat interrupts the flow of gas to the timing device, stopping the latter, and thus suspending the operation of the apparatus. When the car temperature rises above the thermostat setting, gas is permitted to flow again to the timing device, and operation is thus resumed. In this manner the car is kept at any desired temperature, the refrigerating effect automatically varying with atmospheric temperature.

"The relative compactness of the silica gel apparatus permits increasing the lading space about 10 per cent."

In Memoriam

John Scott Harrison, Philadelphia, Pa. J. Haldon Potter, Trenton, N. J. William J. Rodgers, Camden, N. J.

Des Moines Knows How to Do It Better with Gas

HEN the automobile tourist heads West this year, he is going to stay a little while longer in Des Moines, Iowa, than in some other cities. Des Moines has some beautiful park systems, and in three of the largest ones there have been erected for the comfort of visitors log cabins equipped with gas stoves and fireplace heaters.

Monthly Window Display Card Service Is Started

A MONTHLY service of oil paint window and display cards has just been inaugurated by the Bishop Publishing Co., 833 Dobson St., Evanston, Ill. These are especially prepared for gas companies, and the Window Display Committee of the Commercial Section will approve the cards as they are sent out.

Gas companies may place orders to receive four cards a month for one year. About 10 days preceding receipt of each monthly set of cards, a folder showing the cards in window displays is sent out. The cards are 14½ x 19 inches. The price of the service is \$4 for each monthly set of four cards.

Companies interested should write to the Bishop Publishing Co. direct.



A typical oil paint card

On the Firing Line of A. G. A. Activities

A Review of the Activities of the A. G. A. The Past. Present. and Future Months-High Spots in Brief and Otherwise

DURING the past few weeks President Fogg has attended and addressed the annual conventions of four groups affiliated with the American Gas Asso-

On March 14 and 15, Col. Fogg was in Springfield. Ill., at the Illinois Gas Association convention, and on April 4-5 was at Newark, N. J., to address the sixth Eastern States Gas Conference. He also spoke before the Pennsylvania Gas Association at York, Pa., on April 10 and 11. and before the Mid-West Gas Association at Lincoln, Neb., April 18 to 20.

Managing Director Forward spoke before the conventions of three affiliated groups and also appeared before the annual convention of the Maryland Utilities Association at Bal-

timore, Md., on March 23.

Major Forward addressed the Oklahoma Utilities Association convention at Tulsa, Okla., on March 14, and also spoke at the Eastern States Gas Conference on April 4. He appeared on the program of the Pennsylvania Gas Association at York, also.

CORE BAKING FELLOWSHIP IS **ESTABLISHED**

THE Committee on Industrial Gas Research, F. J. Rutledge, of Philadelphia, chairman, has announced the establishment of a fellowship in the use of gas in core baking at the Department of Engineering Research at the University of Michigan, Ann Arbor, Mich. The fellowship starts May 1.

This research will be under the direction of Prof. H. L. Campbell of the Department. Prof. Campbell has done extensive work in determining the properties of cores and core binders. Prof. A. E. White is head of the

Department.

Announcement has also been made by the Committee that the forging fellowship at the University of Michigan has been renewed, starting June 1. W. E. Jominy, a metallurgist of wide experience, is holder of this fellow-

MAY AND JUNE MEETINGS

N addition to the regular committee meetings of the Association, the following are scheduled for the next two months:

Natural Gas Department convention, at Dallas, Texas, May 7 to 10.
Production Conference, at Roches-

ter, N. Y., May 22, 23, and 24.
N. Y. Regional Sales Conference, at
Lake Mohonk, N. Y., May 21, 22, and

Spring Conference of Advisory Council and Executive Board, at Atlantic City, N. J., June 1 and 2. New England Regional Sales Con-

ference-date to be announced.

CUSTOMER RELA-TIONS COMMITTEE OFFERS SERVICES

THE Accounting Section's Committee on Relations with Customers, R. F. Bonsall, chairman, is offering its services to all member companies who feel they have a problem of customer relations.

Member companies of the A. G. A. are requested to analyze conditions in their territory to determine whether or not there is a problem

existent

The Committee's services will be given gladly, and without cost,

STUDY DEALER COOPERATION

REPRESENTATIVES of the Retail Hardware Men's Association, National Retail Dry Goods Association, and National Retail Furniture Association met with the Commercial Section Committee on Dealer Cooperation at Cleveland, Ohio, on March 26. The object of the meeting was to discuss a proposed code of merchandising principles upon which could be based a practical plan of dealer coopera-

The code which was drawn up after consideration of all angles of the problem will be referred for approval to the various associations represented.

MACHINE PAYROLL ACCOUNTING COMMITTEE PLANS REPORT

THE Accounting Section Committee on Machine Payroll Accounting will render an interesting and valuable report this year, according to R. S. Pruyn, chairman.

The report will include the following: The universal rate ticket, cutting plates, the employee's viewpoint of payment by check, holdups, insurance, forgeries, distribution checks, advances and deductions, figuring of labor charges, distribution of labor charges on duplex adding machines, monthly statements,

FIRE INSURANCE PRIMER

THE Insurance Committee of the Accounting Section is at present working on a Fire Insurance Primer presented to the Committee by a joint committee of the A. G. A. and N. E. L. A.

Subcommittee reports on Use and Occupancy, Inventory and Appraisal, and Insurance as a Service Annuity Plan will be given this year, and the chairmen of these committees have reported satisfactory progress. The chairmen of these subcommittees are, respectively, C. N. Alexander, R. T. Kendall, and A. J. Metzel.

WINDOW DISPLAY SERVICE LETTER MAKES DEBUT

VOL. 1, No. 1 of the Window Display Service Letter was mailed from Association Headquarters during the past month. The Commercial Section Window Display Committee, with R. M. Martin as chairman, is planning to make this Letter a regular monthly service.

The first issue was devoted exclusively to water heating. Illustrations of successful windows were given, together with enough descriptive matter and construction details to enable gas companies to use the ideas in their own windows.

Future issues will deal with refrigeration, house heating, etc.

LABORATORY IS BUSY

INDICATIVE of the work being done by the A. G. A. Testing Laboratory, at Cleveland, Ohio, is the fact that the furnace department is working 72 hours a week.

Every other department is also busy, according to R. M. Conner, director.

RATE STRUCTURE COMMITTEE TO ASSIST OTHER COMMITTEES

THE Rate Structure Committee, with G. I. Vincent, chairman, has announced that the subcommittee on Scope of the Committee's Work will be a standing one to maintain contact with and be of assistance to other committees of the A. G. A. which are working on problems involving rates.

T. V. Purcell, of Chicago, is chairman of this subcommittee.

OUR MEMBERSHIP

MEMBERSHIP records at Association Headquarters show that there are at present 6247 members of the A. G. A. The figures given below are as of April 23:

Holding company members	24
Gas company members	622
Foreign company members	4
Manufacturer company members	509
Associate company members	22
Individual members	5066

Course in Selling Gas

(Continued from page 279) vey and of preparing and conducting the sales training course have been entrusted to the Business Training Corporation of New York City, an outstanding organization in this field. This organization has been engaged to conduct similar surveys and prepare training courses for such organizations as the Automotive Equipment Association, United Typothetae of America, Sterling Silversmiths Guild of America, Willard Storage Battery Company, American Piano Company, Hammermill Paper Company, Williams Oil-O-Matic Heating Corporation. Its high standing and past record guarantee the soundness and practical character of every phase of the program. The Business Training Corporation will work at all times in close cooperation with the Association committees appointed for this purpose.

The field survey is already under way and the Association solicits the enthusiastic support of everyone in the gas industry in this most important phase of the work.

Further announcements regarding the course will be made as the field survey progresses.



All-gas Exhibit by Union Gas & Electric Co. at Cincinnali Better Homes Show

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Eastern States Conference Has Best Meeting

Sixth Annual Gathering, Held at Newark, April 4-5, Is Marked By Large Attendance and Important Papers

HEN President H. H. Newman called the sixth Eastern States Gas Conference meeting to order, he opened what was destined to be one of the most important meetings ever held by his geographic division of the A. G. A. More than 800 were in attendance at the meetings in the auditorium of the Public Service Terminal on April 4 and 5.

T. N. McCarter, president, Public Service Corporation of New Jersey, welcomed the delegates to Newark, and in a brief address paid tribute to the splendid health of the industry and its recognized financial stability. Mr. McCarter emphasized the need for confidence in the future, and stressed four specific problems which the 1928 gas man faces.

These problems are: Increased research activity, concentration of manufacture in large and efficient plants and distribution over wide areas, scientific and business getting rates, and salesmanship. Mr. Mc-Carter said that the gas industry has barely scratched the surface of its field of utilization, and that "there exists a possible future market of tremendous size and importance." In speaking of the future, he said:

"The economic and social changes taking place in this country are in the main working in our favor. The concentration of population in large urban communities, the demand for convenience and labor saving in our homes, the increase in average income which permits of greater proportionate expenditures for conveniences and the disinclination towards manual labor which has been accelerated by the perfecting of household appliances, combine to make easier the introduction of new uses of gas in American homes. At the same time, modernization of manufacturing methods which gives efficiency of processes first consideration, concentration of factories in manufacturing communities, and the good record already made by gas in many industrial processes make the time ripe for a rapid and wide extension of the use of gas in industry."

Mr. McCarter also presented McCarter Medals to employees of gas companies who had saved lives by the prone pressure method of resuscitation.

President Newman, of Newark, gave a brief summary of the industry's progress in his presidential address. He touched upon the various problems of today, and mentioned specifically those of the domestic load, advertising, and employee education. J. Calhoun Smith, Reading, Pa., reported a healthy financial condition for the Conference.

Alexander Forward, managing director of the American Gas Association, next addressed the conference, Major Forward touched on some high-lights of A. G. A. activities, mentioning the large attendance at committee meetings, the amalgamation with the Natural Gas Association, and other developments. He called today the day of giants in industry, and said:

"The entire gas industry is awake with the spirit of inquiry which means the spirit of research. A review of the present research activities pursued by the American Gas Association is illuminating and impressive when gathered together into a single exhibit. The best thought of the Association is at this time concentrating on coordination of pure research so that we shall expend our resources and our energies upon those subjects the most important for today and tomorrow and this review will unquestionably lead to the opening of new channels of research which, after all, is the spirit of science applied to the practical needs of the day.

"This goes for study and research in sales as well as technical matters. Even those of us who are familiar with the daily progress of Association affairs are amazed when we see marshalled together the list of research activities already in progress in commercial and scientific lines. Nothing can be more significant than this fact.

"We are big today but our size is nothing to what it will be in the near future. When that day comes the men and women of the industry who have used their heads and their hearts and indulged in some foresight will reap the rewards of their individual contributions to a great public service."

H. J. Farrell, Passaic, N. J., presented an extremely interesting paper on "Increasing the Use of Gas in the Home." He brought out the necessity for knowing the market for domestic gas appliances, and then proceeding along sound, economic merchandising lines. He outlined the various uses for gas in the home and said that a certain percentage of the business is secured without much sales effort. The rest "amounts to a case for common sense to determine what additional load we can get at a cost which would warrant a continuous program of expense and afford us proper returns."

Mr. Farrell said that selling the combination coal and gas range is an example of a "program which will not do much toward increasing gas usage in the average household." He also said that "one basic calculation which companies will make in the future will be to determine actually what they can afford to pay for increased consumption." In Mr. Farrell's mind cooking and water heating are the two greatest fields at the present time, the other uses for gas falling more or less into the class where the salesman is handicapped by handling a little-known appliance.

H. J. Long, New Brunswick, J. P. Hanlan, Newark, and J. B. Jones, Bridgeton, were among those taking part in the discussions of this paper. Mr. Long stated that the salesman is the answer to increased business, and that 1928 compensation must go hand in hand with 1928 sales methods. Mr. Hanlan differed with Mr. Farrell on the combination coal and gas range, but thoroughly agreed that more merchandisers are needed.

Following the morning session, a brief meeting of the New Jersey Gas Association was held. Officers elected are mentioned elsewhere in this issue.

At the afternoon session, R. C. Edlund, of the Cleanliness Institute, described in

detail how gas companies may tie-in with the program being carried on by that organization. An article on this appeared in the March issue of the Monthly.

E. F. Coffman, Camden, presented a paper on "Gas Dehydration" which was a thorough review of this important technical subject. Mr. Coffman said that progressive gas engineers are realizing that the dew point of the gas they are distributing must be reduced sufficiently to prevent the deposition of moisture. He explained the nature of a water vapor survey he had conducted, which included low pressure, intermediate, and high pressure systems. Of these, only the intermediate has no significance as a dehydrating unit.

Mr. Coffman covered dehydration by compression and positive cooling, the action of water sealed holders on dry gas, etc. Results of tests proved that gas of low saturation passing through a water sealed holder will pick up water to saturate almost completely the gas. When the water was covered with a layer of oil, tests proved the moisture content was only increased slightly. The speaker closed with a summary of the methods and advantages of dehydration.

W. H. Fulweiler, and P. T. Dashiell, both of Philadelphia, took part in the discussion, and W. G. Gribbel gave the meter manufacturers' point of view.

Herman Benz's paper on "Collections with Good Will" followed. Mr. Benz gave a careful review of the many ramifications of the collection problem, covering every phase of the subject. He said:

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"A satisfactory collection situation depends upon the cooperation of everyone in the organization. The proper esprit de corps must exist first among ourselves. Team-work all around is the key that alone can make our collection service what it should be and what it can be and what it will be if only that means is applied."

He outlined the type of employee needed, the necessity for a competent complaint department, and the need for regularity. it

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Kenneth Mayer



M. F. Aumack



Cecil Warren



J. D. Lynch

AT the Eastern States Gas Conference four men were awarded the McCarter Medal and certificate for saving life by the prone pressure method of resuscitation.

Those honored are:
Jarvis D. Lynch, superintendent of the street department, Peoples Gas Company, Glassboro, N. J.

Millard F. Aumack, general foreman, dis-

tribution department, Jersey Central Power

& Light Co., Red Bank, N. J.

Kenneth Mayer, Jersey Central Power &
Light Co., Point Pleasant, N. J.
Cecil Warren, Jersey Central Power &
Light Co., Asbury Park, N. J.
John E. Irwin was awarded a certificate
for excitating Warren in the resuscitation of

for assisting Warren in the resuscitation of a fellow-employee overcome by gas.

Extremely interesting discussion followed this paper. Some of the points brought out were:

Since for service rendered, the gas company gets a small unit of family budget, the idea must be conveyed to the customer. Ask-

ing for payment is only reasonable. It is no favor to the customer to let his unpaid bill go from month to month. Where collections are good, public relations are good. Poor paying customers are not good prospects for more or new appliances. The family behind in payment is going to economize until the bill is paid.

It was mentioned that selling appliances also calls for selling the gas bill. One man said that there are about 40 house heating installations in his territory, and not one serious high bill complaint has been received. The bill was sold with the heating service.

P. H. Gadsden, vice-president, The United Gas Improvement Co., presented an address in which he paid tribute to the many traditions which mark the industry. Mr. Gadsden referred to the traditions of economy in production and distribution, good public relations, conservative financing, etc. In speaking about public relations he said that commercial institutions use service as a sales argument, while service is the essence of the utility industry.

The speaker referred to cases of personal heroism that "service might not fail," and then mentioned the tradition of loyalty to government and the presentday question of government interference in business. He said:

"Reduced to essentials the question is, shall the Federal Government confine its activities to the political field, leaving its citizens free by their initiative and enterprise and selfreliance, to develop the field of business? Has the time come when we can safely turn over to the Government the management and control of the electric power industry, one of the chief factors in our amazing industrial development? It is this privately developed industry which has put at the service of the American people about five horsepower per man as compared with two and a half horsepower per man in England, making possible in America the highest standard of living and rapidly taking the drudgery from American labor.

"This is the issue and it is well that we

"The government must stay out of the electrical field or private capital will leave it. There is no room for both."

The second day's program opened with an address by Oscar H. Fogg, president of the A. G. A. Col. Fogg emphasized proper understanding of the public and the value of the proper kind of research and sales analysis. He showed that various A. G. A. activities are keeping the industry abreast of the trends of the times.

The necessity of advertising on the budget plan was brought out in "Common Sense Advertising," by Charles W. Person, secretary of the Publicity and Advertising Section of the A. G. A.

He pleaded for budgeted advertising as against expediency advertising, and brought out the fact that a recent survey revealed that approximately 35 per cent of gas company advertising is of the expediency variety. He said:

"When it becomes better known in the gas industry that an executive who permits his company to advertise without an appropriation or budget is displaying in behalf of himself and his company a lack of good business judgment, we may expect to see advertising achieve for us some of the things it is doing every day for other industries which adhere to a policy of sound planning and effective budgeting of advertising expenditures."

J. P. Hanlan and C. E. Bartlett added to Mr. Person's remarks.

In the "Human Side of the Gas Business," G. I. Vincent, of Syracuse, N. Y., talked on good will and public relations from the angle of the so-called "Bill Jones" plan which has proved so successful in his city. The essence of this plan is making a group of men the contact men for every phase of the company's business with the public. Mr. Vincent also stressed the need for better rate structures and sufficient advertising and publicity.

Mr. Vincent said: "The customer is our unit."

N. W. Sultzer, New York, presented a paper on "The Cottrell Electrical Precipitation Processes."

H. H. Ferris, Newark, gave a description of the Harrison plant of the Public Service Electric and Gas Co.

In the afternoon three inspection trips were arranged for the delegates. One was to the Harrison plant, one to the appliance exhibit, and the other to the bookkeeping department of the Public Service Electric and Gas Co.

J. L. Conover was in charge of the latter, and he described in detail the billing processes.

In the evening the annual banquet was held, with President Newman as toastmaster, and Rev. Gill Robb, national chaplain of the American Legion, as speaker.

Revised Resuscitation

Booklet Ready Shortl

THE new and revised edition of the Resuscitation Booklet issued by the American Gas Association will be available shortly. It will include the standardized text for the prone pressure method of resuscitation.

Prices will be announced later.

Unique Exhibit Wins First Prize at Home Show

FIRST award, a plaque and \$50 in gold, in the division of home building and equipment, was awarded to the Elizabethtown Consolidated Gas Company, at the "Own Your Own Home Show" recently held at Elizabeth, New Jersey.

At the exhibit the company demonstrated to the public what a twentieth-century cellar should be like. This neat and attractice display, featuring a gas-fired boiler with automatic controls, as well as bridge set and lounging chairs, presented a direct challenge to the unsightly cellars so common to-day. The old-fashioned cellar, with its coal bins and ash cans, as well as paper and rubbish, was transformed into a neat and attractive card room. Curtains adorned the windows, and flower boxes placed beneath them completed the picture.

That intense interest was shown by the public is evidenced by the fact that more than 60,000 people visited during the week.

The gas-fired steam boiler was the only appliance shown by the Gas Company. At each end of the booth were shown, under the Laboratory approval seal, a list of domestic and industrial appliances sold by the company.



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Favorable Comment From the Press

AN extremely interesting article by N. T. Sellman, of the Consolidated Gas Co. of New York, appears in the March issue of Good Housekeeping. Mr. Sellman discusses the value of "Heating a House with Gas."

After consideration of all phases of house heating, the author concludes with this para-

"In purchasing a gas boiler or furnace, seect one which has been approved by the American Gas Association Testing Laboratory. This approval guarantees the rating of the boiler and assures the user that the capacity stamped on the front of the boiler can be readily obtained under any normal conditions of gas service."

under any normal conditions of gas service."

In discussing the attempt of savings banks in New York State to bring about revision of the law, the Saturday Evening Post, March 10, comments editorially as follows:

".... the most significant request is for legal permission to invest in certain carefully defined high-grade, underlying bonds of utility companies dealing in such commodities as gas and electric current... Not only do the savings institutions need the diversification which ownership of a reasonable percentage of good utility bonds would afford, but the utility industry will lose nothing by the setting up of such a clear-cut standard of sound investment."

Under the heading, "Selling Industrial Gas As A Chemical Engineer's Career," Chemical and Metallurgical Engineering, March, 1928, has the following editorial:

"Almost any industrial process calling for heat is a possible application for fuel gas. Already there are over 21,000 industrial operations using gas fuel, and the field for expansion is practically unlimited. Every chemical engineering industry already uses gas heating in at least one application. And the situation is the same in the metal, textile and other fields.

"The one common characteristic of all these applications is their unfailing diversity. Not only does each type of equipment to which gas heat is applied call for an individual engineering study, but almost every single piece of a given type of equipment calls for such a study. This is because of the almost endless variety of influencing conditions that can surround any given type of application. The salesman of industrial gas for process heating must literally be able to absorb and digest in a few days all of the information about a plant and its processes that the operating engineers have acquired in years of study and experiment.

"It is because of this necessity for becoming

quickly familiar with a great variety of industries, that the general manager of a large gas company recently declared that chemical engineers made his best salesmen of industrial gas heat. Thoroughly trained in basic engineering and in the application of processes through a wide range of industries, the chemical engineer has proved to be able to familiarize himself with new sets of conditions more quickly than engineers trained in other branches. Considering this fact, together with the possibilities for growth and advancement that the field presents, it would seem to be worthwhile for recently graduated chemical engineers to investigate industrial gas selling as a possible career."

The gas plant at Sanford, Florida, municipally owned and operated, has been sold to private interests. In commenting editorially on the sale, the Sanford Daily Herald says, in part:

"To begin with, the City spent nearly a hundred thousand dollars for a gas plant and system, which was immediately junked with the exception of about twenty thousand dollars worth of equipment. With the remaining two hundred and sixty thousand dollars authorized, an almost new plant was placed in operation. Under City supervision for nearly three years, the plant has lost money steadily, and last year the deficit was more than twenty-five thousand dollars.

"Shouldering this enormous burden the people were also forced at various times to endure poor service in the form of gas pressure that was not sufficient to meet ordinary needs. We have been subjected to exorbitant bills and for the past two or three months they have been prohibitive, as if to keep coals on an already hot fire. After experiencing these various injustices, it is small wonder that local citizens welcome private ownership of the gas works.

"The price which the plant has brought is highly satisfactory. It equals the amount of the outstanding bonds for this purpose, and with the sale, the City is relieved of the necessity of raising more than thirty-three thousand dollars annually with which to pay interest and provide a sinking fund to retire the bonds. Another phase of the transaction worth consideration is that the property will again be placed on the tax books to bring the City a good revenue which it has missed for three years.

"From every point of view the sale is gratifying. We've had a costly experiment, but the experience has taught a valuable lesson."

In an article on gas securities in the April issue of *The Rotarian*, John P. Mullen, assistant educational director of the Investment Bankers' Association of America, says in part:

"After one hundred and ten years of operation, the gas industry is still firmly entrenched as a permanent business, and its securities show a solidity and stable value that entitle them to rank with the best utility

"The manufactured gas industry was scarcely ever more prosperous than it is to-day. Its record during the past twenty years has been one of longer steps to increased earning power, greater economics, and a wide popularity."

More College Students Learn About Gas

A. G. A. Committee Makes Significant Progress Report

THE list given on this page brings up to date the report of speeches given at colleges and universities and supplements the list given in the April MONTHLY.

The Committee on Cooperation with Educational Institutions, W. Griffin Gribbel, chairman, is in charge of this activity.

given in the April	MONTHLY. III		nan, is in charge of this activity.	
College Worcester Polytech-	Date Mar. 20	Speaker George R. Copeland	Subject Refrigeration by Gas	Arranged by E. H. Bauer,
nic Institute		Servel Co. W. L. Edell Nat'l Refrigerator Co.		Mgr., Worcester Gas Light Co.
Univ. of Pennsylvania	May 17	John V. Potsles, The U. G. I. Co.	Coal Gas Manufacture	L. L. Moore, Sales Engr., The U. G. I. Contracting Co.
	May 18	Philadelphia Wm. I. Battin, The U. G. I. Co.	Water Gas Manufac-	o. z. contracting Ca.
	May 18	The U. G. I. Co.	Plant & Distribution, Per a Specific Town Plan	
	May 24		High Pressure Distri- bution	
	May 25	C. E. Reinicker, The U. G. I. Co.	Plant & Operating Costs as Determining Fair Rates	
	May 25	A. F. Kunberger, The U. G. I. Con- tracting Co.	By-Products	
	May 31	A. M. Apmann, Consolidated Gas Co. of New York.	Gas Utilization	
Harvard Univ.	Apr. 25	Dr. H. C. Porter	Low Temperature Car- bonization of Coal	A. M. Barnes, Pres. Cambridge Gas Light Co.
Pennsylvania State College	Apr. 16	Russel S. McBride, Consulting Engr. Washington, D. C.	Changing Balance Be- tween By-products & Primary Products	W. Griffin Gribble, Chairman Committee on Cooperation with Educational Inst.
Johns Hopkins University	Mar. 30	C. A. Schlegel, The U. G. I. Con- tracting Co.	Carburetted Water Gas	L. L. Moore, Sales Engr., The U. G. I. Contracting Co.
Iowa State College	Mar.	C. N. Chubb, Pres. Iowa-Nebraska Light & Power Co.	The Romance of the Public Utility Indus- try	C. N. Chubb
University of Michigan	Apr. 19	F. W. Steere, V. P. Semet-Solvay Corp.	The Business of Gas	W. Griffin Gribbel
University of Missouri	Mar. 29	J. J. Burns, The Laclede Gas Light Co.	The Gas Industry and its Future	E. H. Lewis, Gen. Mgr., The St. Louis County Gas Company
Cornell Univ.	May 18	C. A. Schlegel, The U. G. I. Con- tracting Co.	Carburetted Water Gas Manufacture	L. L. Moore, Sales Engr., The U. G. I. Contracting Com- pany
Franklin Union	Apr. 9	E. H. Bauer, Mgr., Worcester Gas Light Co.	Manufacture of Gas	G. S. Barrows
	Apr. 23	E. H. Bauer	Utilization of Gas	
Mass. Institute of Technology	Apr. 13	B. J. Mullaney, VP. Peoples Gas Light & Coke Co.	The Gas Industry and the Future	Prof. J. T. Ward, Mass. Institute of Technology
Univ. of Maine Bates College	May	Dr. T. A. Mighill	The Chemistry of the Gas Industry	Burton Smart, Portland Gas Light Company
Rensselaer Polytechnic Institute	Apr. 19	G. I. Vincent, VP. Syracuse Lighting Co.	The Gas Industry	B. F. Reimers, Public Service Elec- tric & Gas Co.
Purdue Univ.	Mar. 14	R. B. Leckie, Prof. Gas Eng. Pur- due Univ.	History of Gas Indus- try	Indiana Gas Associa-
	Mar. 28	R. B. Leckie	Manufacture of Coal	
	Apr. 11	R. B. Leckie	Carburetted Water Gas Manufacture	
	Apr. 25	R. B. Leckie	Gas Distribution Sys- tems	
	May 9	R. B. Leckie	Recovery of By-Prod- ucts in Gas Manufac- ture	

TIDE OF MEN AND AFFAIRS

Executive Board Honors Ramsdell on 80th Birthday



G. G. Ramsdell

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THE Executive Board of the American Gas Association paid tribute to George G. Ramsdell, librarian of the Association, at the April meeting of the Board held April 12 at Association Headquarters. This was in honor of Mr. Ramsdell's 80th birthday, which occurred on the 30th of April.

J. B. Klumpp, a former president of the

A. G. A., presented Mr. Ramsdell with a beautifully engrossed certificate which conveyed the best wishes and sincere congratulations of the Executive Board.

The certificate reads as follows: "We of the Executive Board of the American Gas Association pause in the order of business of our meeting on Thursday, April 12, 1928, to lovingly commemorate the Eightieth Birthday, on April 30, 1928, of an honored member of the 'Old Guard' of the Gas Industry of the United States and senior member of the Association headquarter's staff, George G. Ramsdell. We take this occasion to wish Mr. Ramsdell many years of health and happiness. The undersigned officers and directors of the American Gas Association, present at this meeting, are privileged to be his friends."

The certificate was signed by every member

Mr. Ramsdell is a member of the famous Old Guard of the industry, of which only four are living today. He was born at Providence, R. I., in 1848. Completing a course at Vincennes University in 1863, he undertook to organize a company to heat Vincennes, Ind., from a central plant. Officials of the Citizens Gas Company became interested in the project, and the result was his appointment as manager and treasurer in 1877.

On March 20, 1928, Mr. Ramsdell completed his fifty-first year in the gas business.

He held the position with the Vincennes company until 1890 when he became general manager of the American Gas Company, at Philadelphia, Pa. In 1905 he became President of the Ramsdell Inverted Lamp Company. In 1911 he was elected secretary and treasurer of the American Gas Institute.

Mr. Ramsdell is known as the "perennial

secretary" of the Society of Gas Lighting, having held that position since 1904. He is also a past President of the Western Gas Association, the American Gas Light Association, and is an honorary member of the Ohio and French Associations. In 1900 he was one of the two American Association officials to attend the International Gas Congress at Paris.

He has been a member of the American Gas Association headquarters staff since the formation of the Association.

HON. DWIGHT N. LEWIS, for many many years a member of the Board of Railroad Commissioners of Iowa and for several terms its chairman, is now director of public relations with the United Public Service Company, Chicago, Ill.

Mr. Lewis has hosts of friends in both the utilities and commission fields and is a welcome addition to the industry.

CHARLES L. CADLE, general manager of the Rochester Gas and Electric Corp., Rochester, N. Y., sailed on April 14 for a 12 weeks' trip to Europe to inspect developments there.

Mr. Cadle was the guest of honor at a surprise party given at Rochester on March 28 by the Chamber of Commerce. Among those present were R. M. Searle, President of the Corporation; J. C. Collins, secretary and treasurer; J. P. Haftenkamp, assistant general manager, and E. C. Scobell, general auditor.

SAMUEL INSULL, Jr., has been elected a director of the Commonwealth Edison Co., Chicago, Ill.

O. J. SHAW, vice-president of the Iowa-Nebraska Light and Power Co., Lincoln, Neb., has resigned to engage in other lines of business. He has been connected with the utilities of Lincoln for the past 18 years.

Mr. Shaw will continue as President of the Lincoln Oil Co. and the Lincoln Insulating Co.

JOHN F. CARNEY has resigned his position as treasurer of the Utica Gas and Electric Co., Utica, N. Y. Mr. Carney leaves after 26 years to become affiliated with Stone Seymour and Co., investment bankers of New York. He will continue to reside at Utica with offices in the First National Bank building.

GEORGE H. STACK, vice-president of the Utica Gas and Electric Co., Utica, N. Y., has been elected treasurer. Mr. Stack was treasurer of the company in 1924, and again resumes these duties due to the resignation of John F. Carney.



T. J. Strickler

MAJOR T. J. STICK-LER, vice-president and general manager of the Kansas City Gas Company, Kansas City, Mo., has been appointed field marshal of the 1928 Allied Charities Drive of Kansas City which will be conducted October 21 to 27.

No greater honor can be confered upon a Kansas Citian than to head this great drive where

all religions and creeds meet on common ground, and Major Strickler was chosen head of the great army of charity workers because of his qualifications as a leader, his wide acquaintance and his faithful service on committees in previous campaigns.

Major Strickler is one of Kansas City's most devoted sons. He served 17 months in France in the Engineering corps and since his return has been active in civic affairs. He is vice-president of the Kansas City Safety Council; chairman of the American Legion committee on employment of rehabilitated men, a member of the committees on public safety, reception and entertainment of the local Chamber of Commerce, Heart of America Post of the American Legion, University Club, Kansas City Club, Kansas City Athletic Club, Mission Hills Country Club, Rotary Club and Engineers' Club.

F. T. PARKS has been appointed manager of natural gas operations of Public Service Company, of Colorado, by Clare N. Stannard, vice-president and general manager.

Mr. Parks is a graduate engineer of the Kansas State Agricultural College, and has been in the Doherty organization since 1916. He has served as superintendent of distribution at Bartlesville, Okla., and also as manager of eastern Kansas and Oklahoma properties, in addition to being manager of the Joplin Gas Co.

THE resignation of Robert H. Lawlor, as operating gas engineer, in charge of production and distribution and assistant to the general manager, has been announced by vice-president and general manager Charles W. Tippy, of Consumers Power Company, at the head-quarters, Jackson, Mich.

Mr. Lawlor will join the sales and engineering organization of the Groble Gas Regulator Company at Anderson, Ind., in which he has purchased an interest. He has been actively associated with the gas business for twenty-five years and is one of the best known gas men inthe industry. Mr. Lawlor came to the Con-

sumers Company at Flint as operating engineer of production and distribution in 1918, and five years later was called to the general office as assistant to the general manager in charge of gas operation for all districts. This included supervision over plants and distribution in Flint, Pontiac, Kalamazoo, Jackson, Lansing, Bay City, Saginaw, Saginaw River, Hastings, Manistee, and Charlotte.

FOUR important changes in the new business department of The Gas Service Co., Kansas City, Mo., took place on March 15, and have been announced by F. M. Rosen-krans, new business manager. The changes affect new business managers at the Kansas City Gas Company, the Wyandotte County Gas Co., The Capital Gas and Electric Co., and the Newton Gas Company.

A. W. Baker, who for the past three and a half years has been new business manager at the Kansas City Gas Company, has resigned. His place has been taken by M. B. Buckley, former new business manager at Topeka, Mr. Buckley taking over his new duties March 15.

R. T. Hildenbrand, who has been new business manager at Wyandotte, has been promoted to new business manager of the Pueblo Gas and Fuel Co. and Mr. Hildenbrand's position at Wyandotte has been taken by Jack Torbert, new business manager of the Newton Gas Company.

GEORGE M. KIRCHMER, of The Brooklyn Union Gas Company, Brooklyn, N. Y., and chairman of the Clean-Up Week Campaign Committee of the Brooklyn Chamber of Commerce, made his radio debut Monday, April 9, when he spoke from Station WLTH on "A Healthful City." His talk was the first of a series dealing with the intensive clean-up campaign which the Chamber's committee will conduct in Brooklyn the week of May 6.

FRANCIS B. FLA-

sistant treasurer of Columbia Gas & Electric

Corporation, was elected

treasurer of the Colum-

bia System. For sixteen

years he was associated

with Stone and Webster

in various financial and

managerial capacities.

HIVE, formerly as-



© Blank & Stoller

F. B. Flahive
after his connection with the Columbia System in 1927, he was made assistant treasurer.

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A FTER having served as president and general manager of the Southern Counties Gas Company for the past 17 years, Ferdinand R. Bain has resigned. The Board of Directors accepted his resignation, which is to take effect immediately, and advanced Franklin S. Wade, vice-president and manager of the corporation, to the new position of President and general manager.

Mr. Wade is widely known throughout Southern California and the Pacific Coast as an executive and leader in the gas industry. Mr. Wade has made the gas business his life work, entering the industry with the Los Angeles Gas and Electric Corporation upon graduation from the University of Southern California in 1905.

Mr. Bain will remain as a director of the Southern Counties Gas Company and in the future will be chairman of the Board. In retiring from active participation in the management of the gas utility he will be free to devote his time to extensive private interests and to gain more leisure for travel and recreation.

Mr. Wade joined the newly formed Southern Counties utility in 1912, in charge of operations, which position he filled until 1925 when he was elected vice-president and manager. Mr. Wade has been active in the introduction of natural gas in Southern California and the development of the gas industry as a whole. He served as President of the Pacific Coast Gas Association in 1922-23 and has been associated with the American Gas Association for many years.



© Blank & Stoller Ed. Reynolds, Jr.

EDWARD REY-NOLDS, JR., was recently elected a vicepresident of the Columbia Gas and Electric Corporation. He will continue to act as secretary of the corporation and have jurisdiction over fiscal affairs.

Mr. Reynolds was graduated from Harvard University in 1915 and received his early public utility experience with

Stone and Webster in Boston, resigning from that position at the outbreak of the World War to enter the U. S. Navy as Lieut. J. G. For three and one half years after the close of the war, he was connected with the Bond Department of the Guaranty Trust Company, and in the fall of 1922 joined the Columbia System as treasurer of the Company.

Mr. Reynolds is well known in financial, banking, and public utility circles.







F. S. Wade

WILLIAM BAURHYTE, president of the Los Angeles Gas and Electric Corporation, Los Angeles, Cal., has resigned, effective March 31st. Mr. Baurhyte, who will remain a member of the directorate, was re-elected to his fourth year as president on March 7, having assumed the presidency in February, 1924. Prior to that time he was vice-president and general manager.

His service with the corporation dates from September 1, 1903, when he assumed the second vice-presidency, having been called from the ranks of the Pacific Gas Improvement Company for that purpose. Mr. Baurhyte entered business life as a law-clerk in San Francisco, 54 years ago, and has been in the public utility business for 45 years. During his extensive service he has established a wide acquaintance in utility circles all over the country. He was president of the Pacific Coast Gas Association in 1912.

Addison B. Day, executive vice-president and general manager, succeeds Mr. Baurhyte and will retain the duties of general manager in connection with the presidency.

Mr. Day's entire business career has been spent in the service of the Los Angeles utility. He entered the employ of the Los Angeles Lighting Company, predecessor of Los Angeles Gas and Electric Corporation in charge of the gas stove department, February 1st, 1895. He has risen successively to the positions of book-keeper, chief clerk in the gas department, chief clerk in the electrical department, manager of the appliance department, auditor, assistant secretary, manager of operation, general super-intendent, vice-president and executive vice-president and general manager. He was chosen to this latter position in February, 1924.

Mr. Day is recognized as one of the leading executives in the public field on the Pacific Coast, and his succession to the position of president was a foregone conclusion when Mr. Baurhyte decided to retire.

Another official change in personnel is the

elevation of H. L. Masser, formerly gas engineer, to the post of vice-president and executive engineer, in which capacity he will have charge of all production, distribution, and construction operations, both gas and electric. Mr. Masser was graduated from the University of California in chemical engineering, in 1914. He served with the engineering department of the Southern California Gas Company and Midway Gas Company and after the World War was with the California Railroad Commission. His service with the Commission was from 1919 to 1924, the last two years as gas engineer. In 1924 he went with Los Angeles Gas and Electric Corporation as gas engineer. He is a director of the corporation.

F. W. MANKER, vice-president Surface Combustion Co., Toledo, Ohio, recently addressed the Syracuse, N. Y., chapter of the American Society for Steel Treating. His subject was "The Selection of Industrial Furnaces."

EDMUND W. WAKELEE, vice-president in charge of law, The Public Service Electric and Gas Co., Newark, N. J., has been elected President of the newly organized Bergen, N. J., Chamber of Commerce.

HALE A. CLARK, industrial engineer of the Detroit City Gas Co., Detroit, Mich., presented an address on "The Advantages and Disadvantages of Gas in Steel Treating," at a recent meeting of the Detroit chapter of the American Society for Steel Treating.

GEORGE B. TRIPP, a well-known public utility executive, has joined the organization of Glidden, Morris and Company, investment bankers, of 5 Nassau Street, New York.

Mr. Tripp for many years has been engaged in the executive management and operations of various public utility properties in this country, was formerly vice-president of the United Gas & Electric Engineering Corporation, and most recently has been in charge of the operations of the Huntington Development and Gas Company, a subsidiary of the Columbia Gas and Electric Corporation, at Huntington, West Virginia.

JOHN L. TUDBURY, manager of the Salem Gas Light Co., Salem, Mass., has been made manager of the Salem Electric Lighting Co., as well as general manager of the Beverly Gas and Electric Co. He has been with the Salem Gas Light Co. since 1911.

Peter Robertson Dies

RECENT announcement from London, England, tells of the death of Peter Robertson, editor of the Gas World.

Davis Heads Stevens

DR. HARVEY N. DAVIS, professor of mechanical engineering at Harvard University and consulting engineer, has been elected president of Stevens Institute of Technology, Hoboken, N. J., succeeding the late Dr. Alexander C. Humphreys. He will assume his new duties Sept. 1.

Dr. Davis was born at Providence, R. I., in 1881 and was educated at Brown and Harvard Universities, receiving the degree of Ph.D. from the latter in 1906. He was an instructor at Brown in 1901-02 and has been teaching at Harvard since 1904.

He has been consulting mechanical engineer of the U. S. Bureau of Mines since 1921. He is a fellow of the American Academy of Arts and Sciences and a member of many other learned and professional societies. Dr. Davis is the author with Prof. L. S. Marks of "Steam Tables and Diagrams" and with Prof. N. Henry Black of "Practical Physics for High Schools."

Joseph Seep Dies

JOSEPH SEEP died, April 1, at Titusville, Pa. He would have been 90 years old May 7.

Mr. Seep was the crude oil purchaser for the Standard Oil Co. in Pennsylvania.

Mr. Seep was head of the Joseph Seep Purchasing Agency, chairman of the board of the South Penn Oil Co., chairman of the Oil City Trust Co., director of the Seaboard National Bank of New York and the Commercial Bank of Titusville. He organized the Kentucky Natural Gas Co. and owned the Mine & Smelter Supply Co., Denver. He was interested in the Modern Tool Co., Erie, and some Titusville industries.

Mr. Seep joined Standard Oil in 1871 when Bostwick & Tilford, for whom he was working, was purchased by Standard. Mr. Seep was born in Germany, coming to this country when 11 years old. In his youth he worked around Cincinnati and later for J. A. Bostwick in the hemp business. He moved to Titusville in 1869 and had made his home there with offices at Oil City.

Copies of Charts Available

LARGE copies of the charts used in the article, "Flow of Gas Through Orifices," by C. George Segeler, in the April issue of the MONTHLY, are available at \$.15 each.

Address requests to the American Gas Association, 420 Lexington Ave., New York, N. Y.

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Affiliated Association Activities

Empire State Gas and Electric Association



H. C. Davidson

THE annual meeting of the Accounting Section of the Empire State Gas & Electric Association will be held at Briarcliff Lodge, Briarcliff, N. Y., on May 10 and 11. An interesting and varied program will be provided.

This will include the reports of the Committee on Fixed Capital Records, the Committee on Installment Sales, and

the Committee on Merchandise Accounting.

Addresses will be made by Preston B. Wittmer, deputy commissioner of the State Tax Commission of New York; Professor Dexter S. Kimball, dean of Engineering School, Cornell University; Henry O. Palmer, president of The Empire State Gas and Electric Association; and John L. Haley, vice-president of the New York Power and Light Corporation. There will also be papers upon recent developments of consumers' accounting and payroll methods. In connection with this, the Westchester Lighting Company will make a demonstration.

The afternoon of May 10 will be given over to a golf tournament and other social activities.

H. C. Davidson, secretary of the Consolidated Gas Company of New York, is chairman of the Section, and will preside at the meetings.

New England Gas Association

THE spring meeting of the Operating Division will be held at the New Ocean House, Swampscott, Mass., on May 18 and 19. Dr. T. A. Meghill, of Massachusetts Institute of Technology, will be the speaker at the first business session on the evening of May 18, and his subject will be "Principles of Physics and Chemistry as Applied to the Gas Industry."

At the morning session on May 19, C. J. Lueders, supt. of gas works, Lynn Gas & Electric Company, will present a paper "Description of Lynn Coke Oven Plant."

The Question Box, which is always an interesting feature of the operating meetings, will have a place on the program. There will be other interesting items on the program. A bridge party for the ladies has been arranged on the evening of May 18.

Wisconsin Utilities Association

THE program is being prepared for the Accounting Section Convention of the Wisconsin Utilities Association to be held at the Hotel Pfister, Milwaukee, on June 21 and 22.

The following are among the subjects being considered in making up the program: Field auditing, merchandise accounting problems, budgetary control, and control of materials and supplies.

Chairman D. W. Faber of the Accounting Section has created a Statistical Committee with Ralph Hughes, of the Northern States Power Company, Eau Claire, as chairman, and a Committee on Classification of Accounts, with John Dockendorf, of the T. M. E. R. & L. Co., as chairman.

Illinois Gas Association



J. A. Strawn

THE joint convention of the Illinois Gas Association, Illinois Electric Association, and Illinois Electric Railways Association, was held at Springfield, Ill., March 14-15.

The Gas Section elected the following officers:

President, J. A. Strawn, Peoria; vicepresident, E. E. Lungren, Aurora; secretary-treas-

urer, R. V. Prather, Springfield.
The Board of Directors consists of the following: P. D. Warren, E. E. Lungren, D. M. Workman, R. S. Wallace, and R. B. MacDonald.

Indiana Gas Association

THE annual convention of this Association will be held at the Columbia Club, Indianapolis, Ind., on May 24.

The convention will open at 9:30 A.M. with a report of the secretary-treasurer, F. B. Tracy, followed by the address of President I. C. Shepard. The remainder of the morning session will be given over to a paper on "Promotional Rates," by C. S. Reed; a paper on "Thermal Basis of Charge in British Practice," by Professor R. B. Leckie, of Purdue University, and an address by B. J. Mullaney, vice-president of the American Gas Association.

Following is the program for the afternoon session beginning at 2:30 P.M.:

Paper "High Pressure Distribution for

Small Communities," by F. L. Reinman; Symposium, "Recent Accomplishments in House Heating Sales," by J. S. Scott, E. J. Burke, and W. W. Schram; and reports of the Auditing, Nominating and Time and Place Committees.

Oklahoma Utilities Association



L. W. Scherer

AT the conclusion of the tenth annual convention of this Association, held at Tulsa, March 13-15, L. W. Scherer, of Yale, vicepresident of the United Telephone Corp., was elected President.

H. L. Montgomery, of Bartlesville, was elected first vice-president, and T. H. Steffens, of Sands Springs, second vice-president. W. R. Emerson, of

Oklahoma City, was re-elected treasurer, and F. F. McKay, of Oklahoma City, was re-named manager.

Gas Division members on the Executive Board are C. W. Robbins, Oklahoma City; R. C. Sharp, Tulsa; H. L. Montgomery, Oklahoma City.

R. W. Hendee, of Okmulgee, was named chairman of the Gas Division.

New Jersey Gas Association



H. A. Stockton

A T the annual meeting of the New Jersey Gas Association, held after the first session of the Eastern States Gas Conference at Newark, N. J., on April 4, the following officers were elected:

President, H. A. Stockton, Atlantic Highlands; vice-president, R. A. Koehler, Newark; second vice-president, Chester Grey, Atlantic City;

secretary-treasurer, Louis Stoecker, Newark.

The following were elected directors for two years:

E. J. Menerey, Glassboro; R. W. Lee, Vineland; J. A. Clark, Jr., Newark.

Directors elected for one year are:

R. R. Young, Newark; R. F. Crowell, Bridgeton; J. D. Alden, Asbury Park.

After the business session the retiring President, John L. Conover, of Newark, was presented with a clock as an appreciation of the splendid work he has done.

Pennsylvania Gas Association



Mark Pendleton

ON April 10 and 11 this association held a record-breaking convention at York, Pa.

The following officers were elected:

President, Mark Pendleton, York; first vicepresident, H. H. Miller, Gettysburg; second vicepresident, Warren Norris, Lebanon; third vicepresident, L. S. Williams, Harrisburg; secretarytreasurer, G. L. Cullen.

Council members elected are C. E. Bartlett of Philadelphia, G. W. Philips of Sunbury, M. N. Bailey of Royerford, A. G. Taylor of Reading, and H. H. Ganser of Norristown.

Pacific Coast Gas Association

THE Annual Northern Conference of this Association is scheduled this year to be held in Vancouver, B. C., on June 6 and 7. Executive Secretary Clifford Johnstone and the program committee are developing a unique program which promises to be most interesting and informative. The program as planned will be a full discussion of only problems of the moment.

Canadian Gas Association

THE 21st annual convention of the Canadian Gas Association will be held in the Royal Connaught Hotel, Hamilton, Ontario, Thursday and Friday, June 21 and 22. Convention committees are working hard on the arrangements and an excellent program is being prepared which includes papers on the new plant of the Montreal Coke and Manufacturing Company; What Some Industrial Gas Surveys Revealed in Four Main Cities; Development of a Coke Market; Benzol Recovery at New Plant at Hamilton, Ontario; A Year's Experience with the Waterless Gas Holder; The Bubble Gas Holder, and Its Place in Modern Gas Distribution; and the Self Clinkering Grate in Water Gas Machines.

The program will provide for an inspection of the Hamilton By-Product Coke Company's plant, which includes new coke ovens and benzol recovery plant. Visits are also being arranged to several outstanding industrial gas installations, one of which consumes about one million cu.ft. of gas weekly.

Further information can be obtained from Secretary G. W. Allen, 7 Astley Avenue, Toronto, 5, Ontario, Canada.

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NATURAL GAS DEPARTMENT

N. C. McGOWEN, Chairman

S. W. MEALS, Vice-Chairman

Cooperation—A Sensible Sales Ally

Bringing Out the Real Merits of Working With Rather Than Against Allied Business

By HERBERT H. SKINNER

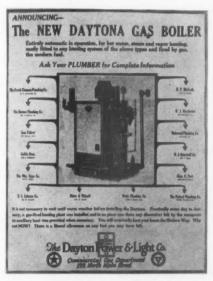
Gas Sales Manager, The Dayton Power & Light Co., Dayton, Ohio

HY should we utility men seek to control the country's heating? Now just suppose you came into my office some bright sunny day and told me that you, a successful plumbing and heating contractor, were quite dissatisfied with our management of the gas business. In fact though possibly a merchandiser I was no blumber.

You had looked into the Utility business quite in detail and knew that gas fitters were not comparable with plumbers; that we employed far too much rough and too little skilled labor, and that many of the latter were underpaid. That in fact our methods were antiquated and that you for one intended to take over all of our underground construction but we could exercise our God given right to distribute gas merchandise.

Now of course not being the chastened butt of a thousand slurring jokes and moreover being financially well able to stand on my own feet and fight, I would certainly not yield to your demands. Surely we would not tolerate you, a plumber assuming control over the construction or any other portion of a business that the traditions of a hundred years decree to be our own. Yet we blandly tell him he is no merchandiser.

Let us stop and think this all over. Are we fair with the heating contractor, the jobber and our own Utility? We all agree that in entering the heating business our only thought was to create a new sales outlet for our gas, but would we wish him to seek on this basis underground construction for his journeymen? There are



The practical aspect of cooperation is seen in this newspaper advertisement

perhaps many technical features at the moment little understood by the existing heating trades, for they have been accustomed to the combustion of coal and coke. Gas with its new problems involving the use of new flue materials, chimney linings as well as Hartford connection, large capacity headers, etc., are now well understood by the heating contractor, but he could hardly have realized their vital importance to the development of automatic gas heating to its present dominant position.

Controls involving electrical solenoid valves of large capacity, hydrostats, vaporstats, etc., safety pilot controls, gas regulators, diaphragms, etc., were all of a nature unfamiliar to many contractors in the plumbing and heating trades.

Under such conditions a Utility alone could assume the expense essential to success. Some one must pioneer and we were entitled to reap some reward for it all. This was reasonable but now at a time when much of the engineering has faded away in the miscellaneous new business expense account, are we still entitled to dominate this promotion to the entire exclusion of the plumbing contractor and boiler supply dealer?

When we remove a coal-fired boiler or perhaps connect in tandem with such antiquated equipment, some one must assume a large sales expense and perhaps in many cases will receive little cooperation from any plumber when putting over the proposition. Experience has shown in some instances even a determined though somewhat obscure effort on the part of the dealer to sell another coal boiler or perhaps an oil burning system to our prospect. Situations of that nature are very common to those selling Gas Heating.

Heating contractors often do not observe the same standards of fair cooperation to which we are accustomed. Many of them will even admit this to be true but on the contrary they will defend this attitude by claiming that past experience prompts a little caution on their part in extending the influence essential to develop a market for gas-fired boilers in his territory. It is often the spirit of the weak warding away the strong.

We would suggest that you win his support by acts and not by words. He will extend some cooperation but you can hardly expect him to sell our gas boilers when we admit their cost of operation to be in the light of what he terms exorbitant. Even though worth considerable money, he is nevertheless hardly so far removed from a stillson wrench as to forget the value of a dollar. To him heat is heat, and a service that to many of our customers proves of real value.

appears to him a senseless waste. Therefore forgive him for being a little chary of his praise toward our own business of gas heating.

When you sell a gas boiler in a new home, some one fails to sell a coal boiler. The manufacturer and jobber are out of pocket on their profit, and at least one, viz.: the jobber, is certainly not going to sit quietly by and lose his entire heating business to a gas company. His estimators must undertake much, possible all of their former expense of working out radiation and can hardly be blamed for the tenacity with which they cling on to an old established coal boiler business.

It seems, therefore, reasonable that every Utility should so price its gas equipment as to allow a jobber as well as the plumber a reasonable and proper profit.

We wish to establish an outlet for our gas, to in fact heat the Nation's homes and it is only reasonable that we seek a margin commensurate with our sales ex-Every heating contractor will agree to this but he also feels that for us to sell a boiler direct to a consumer and then expect him to be contented with a piping contract, is manifestly unfair, Carried to its ultimate conclusion he would sink to a position of being only a piper. You would reduce him from a business man to a mere purveyor of labor and material and unless operating on a large scale he would be forced to again labor with a kit of tools. Is this hardly reasonable?

The heating contractor feels that in view of the fact that we destroy his existing business which is selling coal boilers and create an entirely new business, one out of his control and dominated by policies that he is powerless financially to sustain, that under such conditions some portion of the margin of profit rightfully belongs to his trade. That is to say some part of the profit on our direct sales.

Admitting the soundness of this reasoning and that the principle is fair, then as we see it the margin due the plumber on accounts sold by the Utility should be equal to the profit in dollars that would

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accrue to him through the sale of coal boilers of equal capacity. As coal boilers sell at about one half the cost of gas equipment of equal rating, then it is evident that justice is served with a 10 per cent bonus.

Under such a policy it would be the intent of a Gas Utility to sell boilers to the heating trades at a discount of 20 per ent from the consumer's price, but in the event a customer's order was secured on which the plumber had extended no sales effort we would pay him nevertheless a bonus of 10 per cent on the retail price of the boiler in addition to any benefit secured through the installation contract.

Even the jobber should receive at least some reasonable and just discount beyond that extended to the plumber though it seems hardly possible to further compensate him on direct company merchandise sales, unless they can reduce our sales expense.

Suppose we were to accept this policy in a really National way—it could hardly mean any great amount of increased distribution costs. In fact perhaps the plumber could and would so cooperate as to actually reduce our net sales expense. At least the plan is worthy of general consideration.

We hear all too frequently that the plumber is no merchandiser. He admits it; his national organization admits it; the trade extension bureau admits it but what has that to do with the issue. He could well say we were not plumbers.

The country storekeeper is often no merchandiser; the railroads and inland steamship companies are no merchandisers and when I look over the immense field that we are trying to cover and the laggard manner in which we go about our business, I am led to believe that among the country's industries, we are as gas companies poor merchandisers.

The dry goods and hardware people do not take over the country storekeeper and the coal mines do not seek the control of transportation companies with the



The plumber is a business man and cooperation with gas companies appeals to him as a business proposition

thought that through their omnipotent control of such markets more goods will be sold in the stores and more coal burned in hauling our railroad trains.

Is it therefore just that we should attempt any sales policy that will weaken a business so essential to our well being as that of plumbing and heating? Is it not more sensible to build than to destroy this existing source of real co-operation.

Natural Gas Will Give Helium at Amarillo, Tex.

THE closing of a contract with the Amarillo Oil Co. of Amarillo, Texas, which, it is thought, will greatly increase the available supply of helium, the rare non-inflammable gas required for dirigibles, is announced by the United States Bureau of Mines, Department of Commerce. Under the contract, the Bureau will undertake the extraction of helium from natural gas from the company's leases on the Cliffside Structure in Potter County, Texas, at a new helium plant to be constructed by the Government at Amarillo.

The Bureau of Mines has had jurisdiction over production and conservation of helium for the War and Navy Department since July 1, 1925. All of the helium produced by the Government, to date, has been extracted from gas from the Petrolia field in Clay County, Texas, at the United States Helium Production Plant.

As this source is no longer capable of meeting demands, the Bureau of Mines has been working toward development of other fields.

Knowing the Government's need for increased supplies of helium, the Amarillo Oil Company, through its President, N. K. Moody,

offered to place gas from its leases on the Cliffside Structure at the disposal of the Government and to provide for the disposal of gas from which helium has been extracted. After thorough study by the Bureau of Mines' engineers of all known sources of supply of helium-bearing gas, the Cliffside Structure was found to be the most promising field upon which a new project for augmenting the production of helium might be based; also the vicinity of Amarillo was found to be a suitable location for a helium plant.

Through cooperation of the officials of the Amarillo Oil Company, the details with regard to the gas supply and disposal of the residue gas were worked out to the Government's satisfaction. W. H. Bush, of Chicago, Ill., through his agent, James Bush, of Amarillo, and Lee Bivins, and the Fuqua Land and Cattle Company of Amarillo, fee owners of the land from which gas for the project is to be drawn, were also instrumental in working out practicable arrangements.

Preparations are now being made for the erection of a helium plant near Amarillo to process gas from the Cliffside Structure. The details of plant location and construction are not yet fully developed, but it is planned to develop a helium project at Amarillo which will be an important factor in national defense.

Helium will be recovered by cooling natural gas to approximately 300°F. below zero; then all constituents of the gas, except helium, are reduced to liquid state. The helium gas will be drawn off and compressed for shipment. The remaining liquid, consisting of the original gas, will be returned to normal temperature and delivered in Amarillo as gas fuel. The heating value of natural gas is improved by extraction of helium, because the helium and other inert gases removed have no fuel value, says the Bureau of Mines.

The low temperatures used in the plant will be produced by the compression, cooling, and subsequent expansion of gases following practices similar to those used in other plants designed and erected by Bureau for purification of helium after use in airships.

IN THE MAIL BOX

PORTLAND GAS & COKE Co. Portland, Ore.

To the Editor:

Apropos of page 35, January issue, A. G. A. MONTHLY here's a thought.

Why not join with the electrical people and nationally create a desire for home cooking and an antipathy to eating out of a nosebag. They are vitally interested in the result, same as ware. Together we would be a power. Human beings will eat what they are advised to eat, if only told often enough—as witness the demand for liver.

JOHN HARTOG

Utility Advertising Is Essential, Says McCulloh

THE responsibilities which public utility companies bear to the public, their stock-holders and employees make advertising indispensable to continued successful operation, said J. S. McCulloh, president of the New York Telephone Company, before a recent meeting of the Advertising Club of New York. The use of advertising to explain changes in policies, operations or temporary conditions, he pointed out, has no comparable medium.

A public utility company often has periods when it needs the co-operation of the public in order to accomplish its program, he explained. In illustration of this point, Mr. Mc-Culloh said that the New York Telephone Company, after the war, experienced a period in which it had to recover from run-down service and changing conditions. As the first step in the improved service campaign, the company advertised to the public that its service was not what it should be and requested the people not to complain until the company had had a chance to build up its run-down The result, he stated, was that the telephone company was able to accomplish the work much more efficiently, because of the public co-operation.

THE NATURAL GAS INDUSTRY

MEETS AT

Dallas, Texas, May 7-10 AND YOU SHOULD BE THERE

Annual Convention, Natural Gas Department, American Gas Association

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ACCOUNTING SECTION

EDWARD PORTER, Chairman

F. H. PATTERSON, Vice-Chairman

H. W. HARTMAN, Secretary

Keeping the Customer's Good Will When He Receives a High Bill

By H. M. PACE

Assistant to Vice-President and General Manager, South Carolina Power Company, Charleston, S. C

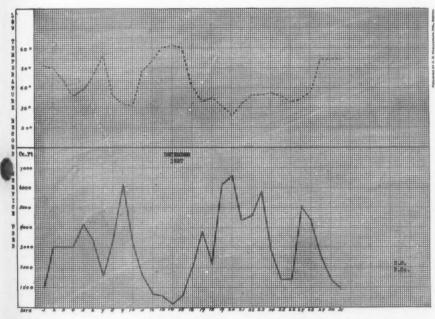
In sections of the country where much gas is used for space heating, some thought must be given to the preparation of data with which to answer complaints about bills. Those in the gas business know that space heating is governed largely by temperature, although only a few customers ever consider it from this angle.

The ever-ready servant gas is called into use when the temperature drops below a point of comfort. In a day or so the weather warms up and the cold spell is banished from the mind of the customer. At the end of the month the bill

is presented and the customer is asked to pay for something which was used and enjoyed, for it added to the joy of living or working, in the home or place of business. But there is nothing to show for it except the bill.

Graphs indicating the low temperatures for each day of the month and the actual consumption of a space heating customer, which is obtained by daily meter readings, are effective in pointing out the demands that are made on the service when the temperature begins to drop.

We have used these to good advantage for the past several winters. They have



Record of commercial heating installation in Charleston which shows how temperature affects gas consumption

enabled us not only to show clearly the demand on the service, but have been helpful also in describing the value of daily readings of the meter, and, what is more important, that the performance of the meter is not the controlling factor in the size of the bill.

These graphs have assisted us in detecting and pointing out to customers just how the service is wasted when the heating devices are used on warm days.

The district service men who visit the homes of customers to read meters carry copies giving actual records of temperature fluctuations, and use them effectively in preventing "kicks" about bills.

Graphs are plotted on a duplicating stencil from day to day. At the end of the month copies are made and distributed to our employees who can use them in their daily contacts with customers.

Maryland Association Elects

THE Maryland Utilities Association elected the following officers at its recent annual meeting:

President, H. T. Connolly, of the Washington, Baltimore and Annapolis Electric Railroad Co.

Vice-president, H. A. Brooks, of The Potomac Electric Co.

Treasurer, R. E. Towne, of The Potomac Edison Co.

Secretary, David Kinnear, of the United Railways and Electric Co.

The following directors were also elected: Adrian Hughes, United Railways and Electric Co.; L. G. Smith, Consolidated Gas Electric Light and Power Co. of Baltimore; C. H. Leatham, Potomac Edison Co.; Frank Myers, of Westminister; Frank Mitchell, Eastern Shore Gas and Electric Co.; G. W. Wolford, Dorchester Water Co.

Alexander Forward, managing director of the American Gas Association, was a speaker at the annual meeting.

Foreign Commerce Book

THE "Foreign Commerce Handbook, 1928-1929" has just been issued by the Foreign Commerce Department of the Chamber of Commerce of the U. S. The book contains a list of the leading sources of export and import information and service. It should be particularly interesting to manufacturer members of the A. G. A. doing export business.

Bridgeton Company Gets Local Editor's Praise

UNDER the head "Our Excellent Gas Service," The Bridgeton, N. J., Evening News for March 31 calls attention to plant construction activities of the Bridgeton Gas Light Co.

The following editorial is taken from the same edition of the paper:

PROGRESSIVE SPIRIT

The article in our news columns with reference to the extension plans of The Bridgeton Gas Light Company again calls attention to the progressive spirit of this wide-awake company.

Coming just at this time, it should, and no doubt will, serve as a stimulation and provide confidence to others who have development and building plans under consideration.

The Bridgeton Gas Light Company is distinctly a Bridgeton institution. It is owned by Bridgeton stockholders, employs fifty-five Bridgeton men and women, and it spends every dollar needed in the operation of its business, that it can spend, right here in Bridgeton.

It is, of course, true, however, that the gas company expects these main line expenditures and improvements to return them a profit in the due course of time, but that does not detract from the spirit of progress, and our congratulations are hereby extended to the executive officers and the Board of Directors, the stockholders and the employees.

SPRING COMES TO THE GAS HOUSE

Spring has arrived at the Gas House,
How is a fellow to know?
By the great, red tanks of the Gas House
Sprouting like bulbs in a row.
Wandering sunbeams announce it,
Gilding the windows long bleak.
Bargain cut flowers in vases
Bloom in the shop of the Greek.

Hear the hydraulic canaries
Peddled around on the street.

"Gee, how them boidies do goigle!"
Warbling away there so sweet.
Somewhere the swallows make summer
Twittering, trying to sing.

Grander, cast-iron canaries—
They tell the Gas House it's Spring.

-Fairfax Downey
in New York Herald-Tribune.

PUBLICITY AND ADVERTISING SECTION

E. FRANK GARDINER, Chairman

JAMES M. BENNETT, Vice-Chairman

CHARLES W. PERSON, Secretary

Gas Advertising Thirty Years Ago

By WILLIAM F. O'DONNELL

Advertising Department, The United Gas Improvement Co., Philadelphia, Pa.

THOMAS DOLAN was a believer in advertising. One of his first acts fter The U. G. I. Co. had obtained a ease of the Philadelphia Gas Works in 1897 was to begin to advertise in the newspapers. Prior to that time the business was operated by the City. There was no attempt at merchandising. "Take it or leave it" was the attitude toward the public in regard to gas and gas appli-Almost over-night this was changed. An attractive showroom was fitted up at Broad and Arch Streets. Seven neighborhood stores were opened. A policy of courtesy and service was begun. Folks were told the Company wished to help them enjoy more home comforts and economies and would appreciate this patronage.

The very first piece of newspaper copy inserted, as far as our records show, appeared on April 22, 1898. It was two columns wide by three and a half inches

deep, and read as follows:

ECONOMY OF GAS RANGES

Always ready—no kindling, no ashes, clean, convenient, effective, economical, very best results.

To encourage their use in the homes of Philadelphia, we will

CONNECT FREE

all gas ranges of approved makes, when delivered in the kitchens of homes along the lines of our mains.

THE UNITED GAS IMPROVEMENT CO.

Shortly afterward the "Cook With Gas" slogan was taken up and dominated the advertising space for some months. Women were exhorted to save themselves wood-chopping, coal-carrying, dirt and ashes and overheating the kitchen—sovereign arguments which are useful even at the present day.

In September, 1898, appeared the first circulating water heater advertisement, with the assurance that the heater "doesn't interfere with waterback of range."



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Early in the year 1899 the advertisements were concentrated upon lighting conditions. Customers were informed that the Company would install new burner tips free of charge, and complaints were invited if the lighting was for any reason unsatisfactory. At that time lighting was the backbone of the business. Today Philadelphia has an unusually large volume of gas lighting business, but we don't say much about it because of the comparatively greater importance of the fuel load.

Illustrations began to appear with the advertisements in the summer of '99. They are typical of the period—proud looking ladies with wasp waists, wearing shirtwaists and long skirts, throwing to you the challenge: "I Cook with Gas—, Do You?"

Two of the pictures herewith reproduced show the type of female and the kind of gas range in vogue at the end of the last century. The range was massively constructed of heavy cast iron and well covered with whorls, frills and gingerbread ornaments, after the manner of the old-time coal stoves. One of the pictures is a reproduction of a lithograph calendar issued in the same year. This

calendar is representative of the art of the period, which, indeed, had undergone little change since the Elizabethan era. How different from the style of today! Not only as to fashions, but as to conception, drawing and coloring. The rad-

(Continued on page 314)



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MANUFACTURERS SECTION

H. LEIGH WHITELAW, Chairman

J. A. FRY, Vice-Chairman

C. W. BERGHORN, Secretary

Gas Fuel Used in Making Ranges

Quickmeal Stove Company of St. Louis Finds Gas Best for Enameling

INCE porcelain enamel fused onto iron and steel has become the most popular of all stove finishes and improvements in the technique of its manufacture and application are constantly being made, gas fuel is today playing a leading part in the manufacture of gas ranges.

The American Stove Co. has six separate divisions making and marketing stoves. One of these divisions, the Quickmeal Stove Co., St. Louis, Mo., manufactures gas stoves principally and far reaching developments in equipment and methods of manufacture have recently been made here.

The vitreous enamel department includes three principal sections devoted to grinding, spraying, and baking, respectively. There are five enamel furnaces in this department, all served with overnead conveyors and equipped with speed forks for loading and unloading. While oil was formerly used in this plant, it is being gradually changed over to gas. The first move was the installation of a periodic furnace for burning on enamel.

More recently there has been built here the latest and most modern furnace yet eveloped, for burning or fusing enamel



Assembly line

onto iron and steel, and one which represents a radical departure from recognized practice. Not only does this new unit combine several processes in one, but it is also automatic and continuous in its operation as well. The temperatures and heat gradients, as well as the heating periods, are automatically controlled and spoiled ware, due to the human equation, is reduced to a minimum.

The ground and finish coats are both burned in this unit and the operation of drying is included, thereby doing away with the necessity of a separate oven for this process.

Heat is supplied by 16 gas burners





Automatic and continuous gas-fired furnaces at gas range plant

located in the heating zone, half on either side. These are manifolded and supplied with inspirators which automatically proportion the gas-air mixture for perfect combustion.

The economies effected with this unit include a material reduction in labor, fuel, time, space, etc., as well as the elimination of the extra drying operation, rack moving, patching, transferring, etc.

Proofs of Industrial Advertisements Offered

REPRINTS of certain A. G. A. industrial gas advertisements are available, in quantity, to gas companies interested in keeping this department of the business before their industrial customers and prospects.

In these reprints, the Association is making available a useful and valuable by-product of its industrial advertising in trade papers. The reprints for mailing are available at bare printing and handling cost.

These reprints can be placed individually in envelopes and mailed under one and one-half cent postage to industrial gas users and prospects. The effectiveness of these very economical mailings is increased by the fact that they link up mailings with the advertising that is seen in leading trade publications.

Reprints will be supplied at a cost of \$3.75 per hundred. The size of each reprint is nine inches wide by 12 inches deep. The name of each company can be imprinted below the advertisement at an additional cost of \$1.

Reprints may be ordered of any or all of the

six current trade paper advertisements with the following headings: Why You Should Use Gas the Perfect Fuel, The Final Score-Results, Primitive Results not Profitable, Without Prejudice, Taking the Guess Out of Gas, and No Job too Great for Gas.

3600 Advertisements Submitted in Contest

A LL records were broken in the nationwide 1928 better copy contest conducted by the Public Utilities Advertising Association.

A total of 158 of the leading public utility operating companies of the United States and Canada entered the contest and submitted 3600 advertisements for the judging. The contest closed April 1, and included newspaper and periodical advertising released during the previous year.

Awards will be made for the three best advertisements in each of three divisions: Electric, gas, and transportation. The awards will be made jointly by the Public Utilities Advertising Association with the National Electric Light Association, American Gas Association, and American Electric Railway Association in their respective divisions.

The judging will be done under the direction of a Board of Judges representing these four associations, and by a committee consisting of P. L. Thomson, of Western Electric; J. C. McQuiston, of Westinghouse; and T. J. McManis, of the General Electric Company. The awards will be made at the annual convention of the Public Utilities Advertising Association in Detroit in conjunction with the International Advertising Association on July 10th.



Recent luncheon meeting of the Home Service Committee at Cleveland, O.

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INDUSTRIAL GAS SECTION

F. C. MACKEY, Chairman

J. P. LEINROTH, Vice-Chairman

C. W. BERGHORN, Secretary

Program Announced for M. I. T. Gas Course

Two Weeks' Session for Industrial Gas Engineers Will Feature Subject of Metallurgy

THE seventh annual industrial gas course, sponsored by the New England Gas Association and the American Gas Association, will be held at the Massachusetts Institute of Technology, Cambridge, Mass., June 18 to 28. The major subject to be considered is metallurgy, and a program of great value and interest has been arranged. Advance interest predicates a record-breaking attendance.

While attempting to meet a growing demand for greater specialization, the schedule this year will emphasize particularly the application of gas to metallurgical problems. Yet the course contains sufficient allied and basic subjects as to be one of outstanding attractiveness and help to anyone engaged in the industrial gas sales field. Specific problems will be presented for solution, and an acceptable report of all data available will be made by those attending. Notes and data will be distributed, and equipment in the Institute's gas laboratory will be available for tests, etc.

The work of this course will be handled under the same discipline and system of rating as ordinarily obtained in the curriculm of M. I. T. A certificate will be awarded giving the composite grade received for the entire course.

The tuition will be \$60 per man for the course.

Arrangements may be made for rooms in a dormitory at the Institute. The charge will be \$20.00 a man for the two weeks. In the past those staying at the dormitory have benefited greatly from the exchange of ideas, etc., with their fellow students.

Reservations should be made through Robert L. Gifford, 231 Main street, Pawtucket, R. I.

John J. Quinn, Quincy, Mass., is chairman of the Industrial Gas Educational Committee of the New England Gas Association, and J. P. Leinroth, Newark, N. J., is chairman of the similar A. G. A. committee.

The program of the course is as follows:

Monday, June 18

Welcome, by J. J. Quinn. Report Writing, by Prof. Winnard Prescott. Refractories, by Prof. G. B. Wilkes.

Tuesday, June 19

Insulation, by Prof. G. B. Wilkes.
Theory of Combustion, by Prof. G. B.
Wilkes.

Wednesday, June 20

Metallurgy, by Prof. R. S. Williams. Low Temperature Ovens.

Thursday, June 21

Metallurgy, by Prof. R. S. Williams. Combustion Systems, by G. H. Schwedersky, Providence Gas Co.

Friday, June 22

Metallurgy, by Prof. R. S. Williams. Metallurgy Laboratory, by Prof. V. C. Homerburg.

Saturday, June 23

Process Problems—A special problem lecture on the practical work of the industrial engineer, by R. L. Gifford, Pawtucket Gas Co.

Monday, June 25

Report Writing, by Prof. Winnard Prescott. Temperature Control, by A. M. Stock, The Partlow Corp.

Tuesday, June 26

Metallurgy, by Prof. R. S. Williams. Heat Treating Furnaces, by P. C. Osterman, American Gas Furnace Co. Wednesday, June 27
Metallurgy, by Prof. R. S. Williams.

Competitive Fuels, by J. A. Doyle, W. S. Rockwell Co.

Thursday, June 28

Metallurgy, by Prof. R. S. Williams.

Heat Treating Furnaces, by R. S. Cochran,
Surface Combustion Co.

Friday, June 29 Baking, by E. D. Milener, A. G. A.

The regular meeting of the Industrial Section of the New England Gas Association will be held Friday, June 29, at 12:30. F. C. Mackey, chairman of the Industrial Gas Section of the American Gas Association, will be the feature speaker.

What the Banker Thinks

(Continued from page 266)

work before he can distribute an issue of bonds among his clients,

Having convinced himself after a careful examination that your securities are sound, he must next broadcast to his clients the merits of your securities. The man who lives in San Francisco is not easily convinced that the obligation of a gas company operating in Pennsylvania is a good investment, nor is the investor in Pennsylvania easily sold on a security in California.

Millions have been spent, therefore, by the investment banker telling the investing public what you are trying to do and how you are doing it. This has been done through salesmen going about from place to place telling the people the operations of the companies whose bonds we are selling and secondly, through general advertising campaigns in the magazines and newspapers and by means of educational booklets and direct mail. This advertising has gone a long way to tell the consumer that you are operating on a fair basis and that your charges for service are not exorbitant, considering your service and your product.

No statistics are available to show the

amount of money that has been spent by the investment banker on advertising of this kind during the past ten years but it would certainly run to the millions, and a large portion of it has been in the interests of the gas business.

The gas industry, although much older, has learned a great deal from the electrical industry. True, it has been much easier to transport electricity and for that reaso its use has spread more rapidly and developed what we term today—super power stations. Super-gas, however, is something more than a mere dream. Natural gas has now been piped over 300 miles and in Germany as far back as 1913, the Stinnes Coke Ovens were delivering gas 270 miles from point of origin.

We can soon expect to see, therefore, super gas plants working side by side with super electric plants, conserving to a greater extent the natural resources of the country while giving our industries, our homes and our farms the most convenient service for lighting, heating and power the world has ever seen. Until that time comes and when it has come, let us go on working together for and in the interests of the consumer and the investor.

Production Conference Program

(Continued from page 273)

Tar Separator Design, by H. L. Nickerson, The Brooklyn Union Gas Co.

Open Forum.

Thursday P.M., May 24 (Chemical Committee Subjects)

Strache Kling Portable Calorimeter, by A F. Kunberger, The U. G. I. Contracting Co.

New Developments in Methods of Determinations of Naphthalene, by A. R. Powell, The Koppers Co.

Agglutinating Tests on Coal and Their Interpretation, by W. H. Fulweiler, The U. G. I. Contracting Co.

Laboratory Evaluation of Gas Oil, by E. F. Pohlman, The Peoples Gas Light and Coke Co.

Laboratory Technique, by H. J. Rose, The Koppers Co., Subcommittee progress reports.

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COMMERCIAL SECTION

I. J. BURNS, Chairman

J. W. WEST, Jr., Secretary

G. M. KARSHNER, Vice-Chairman

Program Prepared for Mohonk Conference

New York Regional Sales Conference Will Be Held May 21, 22, and 23 at Lake Mohonk

PROGRAM of exceptional merit has been announced for the fifth annual New York Regional Sales Conference of the American Gas Association, to be held May 21, 22, and 23, at Lake Mohonk, N. Y.

P. B. Wiske, of The Brooklyn Union Gas Co., Brooklyn, N. Y., is chairman of the conference, and E. R. Acker, of the Central Hudson Gas and Electric Corp., Poughkeepsie, N. Y., is chairman of the program committee.

The list of subjects to be covered in the three-day session has been carefully prepared, and those selected to speak have been chosen from various sections and lines of business in order to secure territorial representation as well as quality of material.

The round-table discussions will again be a feature, and it is fully expected that all attending will bring up pertinent sales problems, as has been done in the past.

The same arrangements as to registration fees, hotel rates, and payments will obtain as were employed last year. Suitable entertainment will be offered.

The program is as follows:

Monday, May 21, 8 P.M.

"Introducing the Fifth New York Regional Sales Conference," by P. B. Wiske.
"The Work Ahead," by Oscar H. Fogg,

president, A. G. A.

"Home Service," by Alice Bradley, principal, Miss Farmer's School of Cookery, Boston.

Tuesday, May 22, 9:30 A.M.

"Merchandising as a Factor in the Development of the Gas Business," by Herbert B. Dorau, Northwestern Univ., Chicago, Ill.

"Salesmen's Compensation for Load Building," by Merle E. Skinner, vice-president in charge of sales, Mohawk-Hudson Power Corp., Albany, N. Y., and H. E. Dexter, assistant general commercial manager, Central Hudson Gas & Elect. Corp., Poughkeepsie.

"The Trend of Rates in the Gas Industry," by Prof. J. G. Coolidge, Harvard Graduate School of Business Administration, Cambridge, Mass.

Tuesday, May 22, 8 P.M.

"The Important Problem of Dealer Cooperation," by C. E. Greenwood, commercial manager, Edison Electric Illuminating Co., Boston, Mass., and E. H. Huenefeld, manager, Gas and Electric Appliance Shops, Union Gas and Electric Co., Cincinnati, Ohio.

"Domestic Water Heating," by W. C. Pierce, new business manager, Syracuse Lighting Co., Syracuse, N. Y.

"Laundry Appliances," by James E. Trainer, sales manager, W. E. Lamneck Co., Columbus, Ohio.

Wednesday, May 23, 9:30 A.M.

"Developments in Merchandising Advertising," by Carroll Rheinstrom, director of adv., Mcfadden Publications, New York.

"More and More Appliance Sales," by Col. George Washington Hill, Automatic Electric Washer Co., Newton, Iowa.

"House Heating," by Thomson King, sales manager, Peerless Heater Co., Boyertown, Pa.

THE editor of the MONTHLY has been advised that the item vised that the item in the April issue on the gas-equipped yacht of Col. Rogers was incomplete. F. E. Sellman, of Servel, Inc., advises that there are three gas-fired refrigerators on board the yacht, and R. G. Fensch, of the Dunham Co., writes that there have been many installations of gas-fired water heaters on yachts.

Sales Aspect of Business

(Continued from page 282)

will find in most cases that your fuel cost is higher than that for which you intend to substitute. For this reason you must carefully study operating conditions so as to have offsetting factors. Purchasers are by nature skeptical. You must leave no room for doubt.

When you present your figures, be positive in your statements. Name your costs. Don't shade them to make them look better than you think they will actually work out. It is far better to have the process actually work out better than your estimate. If the reverse, your customer will lose confidence.

Experience has taught that one of the best means of getting heavy duty business is the installation of equipment on trial. When this is done, the customer is usually impressed by the evidence of our being positive that we know what we are talking about. It is proof positive that we are ourselves sold on the proposition we are selling and would not go to the expense of installation if there were any doubt as to performance.

Sell your product on its merits. It has a fine record of achievement for controlability, dependability, efficiency, cleanliness, and economy.

You cannot expect the manufacturer to come to you. He's too busy with his business. You must go to him. You must adopt the same tactics the electrical industry did—carry the fight into the other fellow's back yard. It's one of the main reasons why that industry has reached its gigantic proportions—real salesmanship did the job—it will do it for gas.

The proof of the pudding is in the eating. Will it work? Well, it has:

In 1910 we sold sixteen million cu.ft. of industrial gas; in 1926, 380 million. Of the 503 hotels, restaurants and other eating places, 96 per cent are completely gas equipped. In process work we range from the small soldering pot to the galvanizing furnace in our largest foundry,

from the engraver to the enameling furnace of the refrigerator manufacturing plant that made practically all of the General Electric Company's cabinets last year, from the small home pie factory to the bake ovens that turn out 200,000 loaves of bread per day.

Cutting Main Costs

(Continued from page 272)

have increased the cost more than two or three cents per foot.

It is estimated that the saving on the above 70 jobs by the use of these machines was well over \$5,000.00, due to not having to take out permits and breaking pavement.

Advertising Thirty Years Ago

(Continued from page 308)

ical changes in less than 30 years have been brought about by the development of photo engraving, which makes it easier for the artist to have his work reproduced, and by the great expansion of advertising, which called for more and more pictorial ingenuity to meet competition for public attention.

The two Welsbach Company car cards shown herewith are excellent examples of the art and advertising appeal of the late 90's. The expression on the lady's face when she voices her disgust at being offered an imitation is far from realistic, but folks weren't so critical in those days. And the man back of the counter—who would have such a type as a salesman now? But even at that, he doesn't look like the double-dyed villain who would be guilty of offering a customer an imitation, does he?

Well, we think we've progressed a lot in three decades, but who knows? Perhaps 30 years from now the work in which we take pride will be held up to scorn and ridicule by the supermen of that later day.

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TECHNICAL SECTION

WALTER C. BECKJORD, Chairman

HARRY E. BATES, Vice-Chairman

H. W. HARTMAN, Secretary

Distribution Conference Held at Chicago

Successful Meeting with 450 Present

at the Distribution Conference of the American Gas Association at the Hotel Stevens, Chicago, Ill., on April 12 and 13. When M. I. Mix, of The Peoples Gas Light & Coke Company, called the meeting to order, there were present representatives from practically every state as well as Canada. A large number of natural gas engineers were also present, and this is regarded as particularly significant and proves benefit is derived by both manufactured and natural gas men when they get together.

W. G. Rudd, vice-president in charge of operations of The Peoples Gas Light & Coke Company, gave the address of welcome and stressed the importance of the work of the distribution engineers.

E. F. Schuldt, of Chicago, presented the report of the Committee on Pipe Coatings in the absence of J. K. Crowell, of Mt. Vernon. The bibliography and study of data on corrosion and protective coatings being made by the committee is already in good shape, with 102 references. Other work of the committee covers an investigation of a possible simple test method for determining the relative effectiveness of various pipe coatings under certain conditions. The committee is also maintaining contact with other organizations working on similar problems.

In the interesting discussion following, the value of cooperation with various organizations was emphasized. It was brought out that the East Ohio Gas Company has been successful in using for six years an asphalt base wrapping applied at 350° F. It is believed that this will nearly double the life of steel pipe. The cost of this coating is three cents per

foot for two-inch service, four cents for three inch, five and one-half cents for four inch, six and one-half cents for six inch and eight cents for eight inch.

The report of the Committee on Pipe Joints was given by O. S. Hagerman, of New York. Mr. Hagerman told of the varying opinions and practices regarding joints and emphasized the need for research. It is proposed to have the committee gather all data on joint research and to study such data and prepare a series of tests for each type of joint.

In the discussion following, it was suggested that the committee prepare a plan of procedure in preparing intermediate pressure lines to handle high pressure. Application of cement, lead wool, cast lead joints, and leak clamps was also brought up in the discussion.

The most interesting paper on "Joint Practice As Applied to Long Distance High Pressure Gas Transmission Lines" by E. V. Kesinger, of Bartlesville, Okla., proved of great interest to those in attendance. Mr. Kesinger explained the determining factors in selecting joints for long distance high pressure lines and these points were as follows: Leakage and cost of gas, cost of, size, and speed of construction of line, protection of line and joint against corrosion, maintenance of line and joint, nature of gas, probable life, etc.

Screwed, mechanical, and butt-welded joints were considered in this paper. Mr. Kesinger thought that the screwed joint is unsuitable because of high leakage. The mechanical or rubber coupled joint is popular in 18- and 24-inch sizes, rapidity of construction being a factor. Less leakage, easy protection with the same covering

used on the pipe, ease of repairs, and practically no joint maintenance were the advantages given for the welded joint. His company's practice is to weld all lines 16 inches and under.

R. G. Griswold, of New York, presented a very thorough study on the life of pipe. This paper was published in the March issue of the A. G. A. MONTHLY. It was brought out that each company should interpret its own results.

The Committee on Meters report was given by G. A. Lane, of Chicago, and contained a wealth of valuable data on this important subject.

It was brought out that a leak survey reduces meter leaks in most cases. Mr. Lane said that in March, 56 per cent of old type meters taken in were within legal limits while 69 per cent of new meters fell under this classification. The old type showed almost twice as large a percentage of "don't register" as the new meters.

Charts were used by E. S. Umstead, of Providence, in giving his paper on Advantages of the Meter Bar. Mr. Umstead summarized the practice of several companies and he claimed that there was great diversity. This was further brought out in the discussion and it was evident to those in attendance that this important subject will receive careful study in the future.

V. C. Hoddick gave the report of Committee on Pipe Materials. Composite charts were shown and the comparison of these with practices of an individual company will prove of value, it was felt.

The speaker also explained a recommended type of installation for high and low pressure which he felt had merits not possessed by the composite services.

Following is the problem considered in the report of the Committee on High Pressure Transmission of Gas by F. A. Lydecker of Newark (the report was presented by L. A. Kirch of Chicago): "Assuming a number of towns within a hundred miles radius of various sizes and with no production equipment in existence, determine the relative economy

of supplying towns individually as against one centralized plant with high pressure transmission, etc."

This was a progress report and will not be complete before the annual conference in October. The discussion brought out the fact that the value of this study shows the possibility of high pressure distribution and calls the attention of gas men to this practice.

E. H. Enander, of Chicago, presente. Pressure Regulation for High Pressure Holders and Automatic Pressure Boosters for District Regulators. This was a very interesting presentation and contained much of value for members.

C. S. Goldsmith, of Brooklyn, presented the report of Committee on Distribution Portable Equipment in the absence of J. H. Braine.

The first part of this report dealt with the average direct costs per mile per year for various makes of automobiles, both passenger and truck. This study covered a period of six years, there being 1200 cars the first year, 847 the second, 602 the third, 363 the fourth, 102 the fifth, and 41 the sixth.

The report also gave unit cost figures under various soil conditions and makes of equipment for trenching and backfilling machines. Data for tamping and boring machines, air compressors, pipe pushing machines, tapping machines and drip trucks was included. In connection with drip trucks it was noted that the cost per gallon for pumping drips averaged \$0.0057.

The discussion was concerned with the need for uniform classification of accounts for this type of equipment.

The Open Forum held on the last afternoon proved to be a very live meeting. The necessity for further work on pipe coatings was particularly stressed and it was recommended that a research man be appointed to work solely on this subject. The suggested method of procedure outlined was (a) general survey of problem, (b) experience on durability of various kinds of coatings, (c) cost of addiY 1928

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tional life to the pipe from such coatings and so determine what the savings might be, (d) study and standardization of testing methods, (e) methods of application. The Petroleum Institute have appropriated \$20,000 per year for such work and have appointed a research associate working under the general supervision of the Bureau of Standards.

The question of proper size of regutor to use in going from high or intermediate pressure to low pressure lines was next considered. Methods of handling rust in services and house piping were discussed in detail. The advantages and disadvantages of branch services were discussed in detail bringing out a great difference of opinion as regards such practice.

Many of those attending enjoyed an inspection trip to the Gary Plant of the National Tube Company on April 14th as guests of the National Tube Company.

OUR NEW MEMBERS

GAS COMPANY MEMBERS

The Kansas Electric Power Co., W. C. Blanchard, Pres., 700 Massachusetts St., Lawrence,

MANUFACTURER CO. MEMBERS

Pacific Gas Heating Co., C. Craig, Treas., 424 Sutter St., San Francisco, Calif. Builders Service Bureau, Inc., W. W. Ridings, Vice Pres., 8259 Melrose Ave., Los Angeles, California.

Golden Gate Sheet Metal Works, Matthew McGee, Owner, 1515-14th Ave., Oakland, Calif. Merit Manufacturing Company, E. R. Park-Owner, 6819 Avalon Blvd., Los Angeles,

Cuenther Manufacturing Co., Geo. A. Guenther, Prop., 1281 Jefferson Ave., Buffalo, N. Y. Central Alloy Steel Corp., J. M. Schlendorf, Vice Pres. in charge of Sales, Massillon, O. Automatic File & Index Co., C. W. Straubel, Sec., 10th & River, Green Bay, Wisc.

The Apex Electrical Manufacturing Co., Tom J. Smith, Jr., Asst. Gen. Mgr., 1067 East 152nd St., Cleveland, Ohio.

Quakertown Stove Works, Jos. Cavanaugh, Pres., Quakertown, Pa.

Pres., Quakertown, Pa.
Roesch Enamel Range Co., A. W. Bischoff,

Treas, North 24th St., Belleville, Ill.
McLean Economy Gas Furnace Co., C. H.
McLean, Pres., 1664 Church St., Detroit, Mich-

Naylor Spiral Pipe Co., E. W. Hough, V. P., 1230 East 93rd St., Chicago Ill.

ACTIVE MEMBERS Bentley, George T., Detroit City Gas Co.,

Detroit, Michigan.

Mylting, L. E., Brooklyn Union Gas Co.,
176 Remsen St., Brooklyn, N. Y.
Guernsey, Ernest W., Cons. Gas Electric
Light & Power Co., Baltimore, Md.
Dunstan, Albert O., Cons. Gas Electric Light

& Power Co., Baltimore, Md. Pettjohn, E. S., University of Michigan,

Ann Arbor, Michigan. Gasteiger, Justus A., 3214 Wairebell Ave., South Hills Branch, Pittsburgh, Pa.

Wirt, William Otto, Pennsylvania Power & Light Co., Bloomsburg, Pa. Fitzgerald, Gerald, Maxon Premix Burner

Co., Muncie, Indiana.

Hilbish, J. C., Pennsylvania Power & Light
Co., Sunbury, Pa.

Phillips, George W., Pennsylvania Power & Light Co., Sunbury, Pa.
Knowles, W. R., 10832 Greenlawn Ave.,

Knowles, W. R., 10832 Greenlawn Ave., Cleveland, Ohio. Kuhn, C. J., J. G. White & Co., 37 Wall St., New York, N. Y.

Baggs, Louis Elmer, 801 East Rusholme St., Davenport, Ia.

Stoneking, Emil S., 12108 Wark Ave., De-

Troit, Michigan.
Scheunig, Wilhelm, Manila Gas Corporation,
P. O. Box 1206, Manila, Phil. Islands.
Schweinberg, Fred M., 505 Seddon Ave., N. Braddock, Pa.

Barrows, George S., 211 Hope St., Providence, R. I Salzone, Vincent, 909 Sixth Ave., New York,

Benns, Frank H. Clow Gasteam Heating System, 2403 Main Blvd., Houston, Texas. Berringer, Sidney H., 1217-50th St., Milwau-

kee, Wisc. Scharff, Maurice R., Farmers Bank Bldg., Pittsburgh, Pa.

Crider, Ned, The St. Louis County Gas Co., Webster Groves, Mo. White, Hubert A., Mansfield Foundry Co.,

White, Hubert A., Mansfield Foundry Co., 100 Milk St., Boston, Mass.
Anderson, Ernest K., Anderson Gas Appliance Co., 711 Vancouver Bldg., Portland, Ore. Lothrop, Harry O., Furnace Dealers Ass'n, 591-12th St., Oakland, Calif. Rummel, J. K., The Babcock & Wilcox Co., Bayonne, N. J.
Shaw, Joseph Allan, Koppers Co., Mellon Institute. Pittsburgh. Pa.

Institute, Pittsburgh, Pa. Sedlachek, Ambrose C., 5976 Alder St., Pittsburgh, Pa.

Otten, Miss Carrie, Westchester Lighting Co., 9 So. First Ave., Mt. Vernon, N. Y. Fabian, Tracy, Charles H. Tenney & Co., 200 Devonshire St., Boston, Mass.

Lattie, Albert N., Charles H. Tenney & Co., 200 Devonshire St., Poeter Mess.

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Nesmith, Albert T., Charles H. Tenney & Co., 200 Devonshire St., Boston, Mass.
Chase, Harry B., Charles H. Tenney & Co., 200 Devonshire St., Boston, Mass.
Goss, Kenneth H., Charles H. Tenney & Co., 200 Devonshire St., Boston, Mass.

200 Devonshire St., Boston, Mass. Smith, Alonzo V., The United Gas Improvement Co., Broad & Arch Sts., Phila., Pa.

Headley, John M., Equitable Gas Co., Waynesburg, Pa.
Engler, T. W., Pittsburgh & W. Va. Gas Co.,
Grafton, W. Va.

Hoehle, Armand F., Equitable Gas Co., 435-6th Ave., Pittsburgh, Pa.

Hinerman, G. L., Pittsburgh & W. Va. Gas Co., 543 Center St., Weston, W. Va.

Jones, Leland E., Equitable Gas Co., Pittsburgh, Pa. burgh, Pa.

Lemasters, Lawrence A., Pittsburgh & W. Va. Gas Co., 609 Union Nat. Bank Bldg., Clarks-burg, West Virginia. Newlon, John H., Equitable Gas Co., 435-6th

Ave., Pittsburgh, Pa.

Russo Prosper, Equitable Gas Co., 215-5th Ave., McKeesport, Pa.

Scholfield, John N., Equitable Gas Co., Waynesburg, Pa. Whitwell, Clyde H., Equitable Gas Co., 435-6th Ave., Pittsburgh, Pa. Yoder, Floyd, Equitable Gas Co., 435-6th Ave.,

Pittsburgh, Pa. Batt, Frank, Equitable Gas Co., 435-6th Ave.,

Batt, Frank, Equitable Gas Co., 435-6th Ave., Pittsburgh, Pa.
Beecher, Donald B., Equitable Gas Co., 435-6th Ave., Pittsburgh, Pa.
Bradley, Gore T., Pittsburgh & W. Va. Gas Co., 144 Harrison St., Clarksburg, W. Va.
Ashenhart, John F., Pittsburgh & W. Va. Gas Co., Littleton, W. Va.
Willia Lohn, Cantral Hudson, Gas & Elec.

Co., Littleton, W. Va.
Wilkie, John, Central Hudson Gas & Elec.
Corp., 50 Market St., Poughkeepsie, N. Y.
Ryrholm, John C., Midland Utilities Co., 122
So. Michigan Ave., Chicago, Ill.
Olcott, Horace W., Jr., Northern Indiana
Pub. Service Co., 649 Hohman St, Hammond,

Ind.

Edwards, Leroy M., Southern Counties Gas Co., 810 S. Flower St., Los Angeles, Calif. Black, G. L., Rockville-Willimantic Lighting

Co., Willimantic, Conn. Lander, Kenneth Major, Utilities Power & Light Corp., Asbury Park, N. J. Dick, Irving B., Consolidated Gas Co., 14

Forest St., Montclair, N. J.
Jenkins, Charles E., Wrought Iron Range Co.,

33-39 Bowker St., Boston, Mass.
Ryan, Roger W., Consolidated Gas Co. of
N. Y., Astoria, L. I., N. Y.
Hinkley, James W., 3rd, Central Hudson Gas
& Elec. Corp., 50 Market St., Poughkeepsie, & Ele N. Y.

Hayler, George E., Jr., Henry L. Doherty & Co., 60 Wall St., New York, N. Y.
Niehouse, Raymond N., Ocean Gas Co., 14
Robbins St., Toms River, N. J.

Rugg, Daniel M., Koppers Construction Co., 1911 Peoples Gas Bldg., Chicago, Ill.

Seavey, Haller D., United Electric Light Co., 73 State St., Springfield, Mass.

Weller, Francis R., Allied Utilities Corp., 601-6 Mills Bldg., Washington, D. C. Kline, Samuel M., Brooklyn Union Gas Co., 176 Remsen St., Brooklyn, N. Y

Elbogen, Nicholas, Northern Indiana Public ervice Co., 1503 Ferry St., Lafayette, Ind. Service Co., 1503 Ferry St., Lafayette, Ind. Hodfield, William S. Jr., Peekskill Lighting & R. R. Co., 1020 Main St, Peekskill, N. Y.

Goldsteen, Henry A., The Peoples Gas Light & Coke Co., 3921 S. Wabash Ave., Chicago, III Golding, Francis R., Cambridge Gas Light Co., 719 Massachusetts Ave., Cambridge, Mass. Burrow, Joseph E., Natural Gas Producing Co. of La., P. O. Box 473, Bastrop, La. Cook, Walter D., Westchester Lighting Co., Mt. Vernon, N. Y.

O'Connor, James William, Westchester Lighting Co., 9 So. First Ave., Mt. Vernon, N. Y. Browne, Marion Chapman, Westchester Lighting Co., First St. & First Ave., Mt. Vernon, N.

Donlan, Cornelius M., Westchester Lightion, 9 So. First Ave., Mt. Vernon, N. Y. Co., 9 So. First Ave., Mt. Vernon, N. Y. Conlon, William T., Utica Gas & Electric Co. 258 Genesee St., Utica, N. Y.

Teawalt, Howard L., Consolidated Gas Electric Light & Power Co., Baltimore, Md. Underwood, Herbert R., Gas & Electric Co., Baltimore, Md.

Gleim, William Emil, Standard Gas Equip ment Corp., 134 Garfield Ave., Jersey City, N. J. Zimmerman, E. W., Seaboard By Product Coke Co., P. O. Box 267, Jersey City, N. J. Tozer, C. Boyd, Quick Meal Stove Co., 48th

& Walnut Sts., Phila., Pa.
Gombers, Henry B., Heating & Piping Contractors Nat'l Ass'n, 50 Union Square, New York, N. Y.

Kelly, E. C., The Stacey Mfg. Co., Elmwood Place, Cincinnati, Ohio.
Strother, Albert L., The St. Louis County

Strother, Albert L., The St. Louis County Gas Co., 231 W. Lockwood, Webster Groves,

Sullivan, Fred J., Brockton Gas Light Co., 54 Main St., Brockton, Mass.

Muller, August, New York & Richmond Gas Co., 691 Bay St., Stapleton, N. Y.

Child, F. Malcolm, Consolidated Gas Co. of N. Y., Hunts Point Ave. & East River, Bronx, N. Y.

Cleary, Richard F., Homestead Heater Co., Inc., Selvage St. & Fabyan Place, Newark, N. J. Rockwell, Clifford O., Rio Grande Valley Gas Co., McAllen, Texas.

Crawford, Robert M., 305 Commonwealth Bldg., Pittsburgh, Pa.

Pearsall, Arthur M., Northern Union Gas Co., 310 E. Kingsbridge Road, New York, N. Y Martens, Fred E., Northern Union Gas Co 310 E. Kingsbridge Road, New York, N. Y. Cox, Arthur W., Richardson & Boynton Company, 220 Delaware Ave., Buffalo, N. Y. Coon, George H., Kings County Lighting Co., 6740—4th Ave., Brooklyn, N. Y. Armstrong, William H., Kings County

Armstrong, William H., Kings County Lighting Co., 6740—4th Ave., Brooklyn, N. Y. Murphy, C. E., Sioux City Gas & Electric Co., 526 Nebraska St., Sioux City, Ia.

Klar, Robert L., Des Moines Gas Co., Des Moines, Ia.

Schamp, H. R., No. Indiana Public Service Co., Ft. Wayne, Ind. Pope, Worden, Public Service Co. of Colorado, 1226 Penn St., Denver, Colo. Weaver, Chandler, 670 Emerson St., Den-

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Associations Affiliated with A. G. A.

Canadian Gas Association

Fres. "P. V. Byrnes, United Gas & Fuel Co., Hamilton, Ont. Sec.-Tr.-G. W. Allen, 7 Astley Avenue, Toronto. Carv., Hamilton, Ont., June 21 and 22, 1923.

Impire State Gas and Electric Association

Pres.—H. O. Palmer, Empire Gas & Electric Co.,
Geneva, N. Y.
irman Gas Section—O. H. Smith, Consolidated
Gas Co. of New York, New York, N. Y.
ec.—C. H. B. Chapin, Grand Central Terminal, New
York, N. Y.
Conv., Upper Saranac, N. Y., Oct. 1 and 2, 1928.

Illinois Gas Association

Pres.—J. A. Strawn, Central Light Co., Peoria, Ill. Sec.Tr.—R. V. Prather, 305 Illinois Mine Workers Bldg., Springfeld, Ill. Conv., 1929.

Indiana Gas Association

Pres.—I. C. Shepard, Southern Indiana Gas & Elec.
Co., Evansville, Ind.
Sec.-Tr.—F. B. Tracy, Central Indiana Gas Co.,
Muncie, Ind.
Canv., Columbia Club, Indianapolis, Ind., May 24,

Michigan Gas Association

Pres.—F. W. Steere, Semet-Solvay Co., New York, N. Y. Sec.-Tr.—A. G. Schroeder, Grand Rapids Gas Light Co., Grand Rapids, Mich. Conv., Grand Hotel, Mackinae Island, Mich., July 5 to 7, 1928.

Mid West Gas Association

Fres.—C. A. Nash, United Light & Railway Co.,
Davenport, Iowa.
Sec.-Tr.—A. W. Schmidt, Des Moines Gas Co., Des
Moines, Iowa. Conv., 1929.

Missouri Association of Public Utilities Pres.—W. H. Henby, St. Louis County Water Co., St. Louis, Mo. Sec.-Tr.—F. D. Beardslee, 315 N. 12th St., St. Louis, Mo. Conv., 1929.

New England Gas Association Pres.—G. W. Stiles, Portland Gas Light Co., Portland, Me.
Secretary—E. A. Taylor, 100 Weybosset St., Providence, R. I.
Chairman Operating Div.—H. Vittinghoff, Stone & Webster, Inc., Boston, Mass.
Secretary Operating Div.—H. G. Taylor, Lawrence Gas & Electric Co., Lawrence, Mass.
ov. Sales Div.—M. B. Webber, Marlboro-Hudson Gas Co., Boston, Mass.
Sec.-Tr.—Sales Div.—J. H. Sumner, 719 Massachusetts Ave., Cambridge, Mass.
Pres. Industrial Div.—E. W. Berchtold, Boston Con. Gas Co., Boston, Mass.
Sec.-Tr. Industrial Div.—L. E. Wagner, Providence Gas Co., Providence, R. I. Pres .- G. W. Stiles, Portland Gas Light Co., Port-

Chairman Acctg. Div.—W. A. Doering, Boston Con. Gas Co., Boston, Mass. Sec.-Treas. Acctg. Div.—Otto Price, Boston Con. Gas Co., Boston, Mass. Conv., 1929.

New Jersey Gas Association

Pres.—H. A. Stockton, County Gas Co., Atlantic High-lands, N. J. Sec.-Tr.—Louis Stoecker, Public Service Electric & Gas Co., Newark, N. J.

Ohio Gas and Oil Men's Association

Pres.—J. J. McMahon, The East Ohio Gas Co., Cleve-land, O. Sec.-Treas.—Wm. H. Thompson, 811 First National Bank Bldg., Columbus, O. Conv., 1928.

Oklahoma Utilities Association

Pres.-L. W. Scherer, United Telephone Corp., Yale, Okla. Mgr.-E. F. McKay, 1020 Petroleum Bldg., Oklahoma City, Okla. Conv., 1929.

Pacific Coast Gas Association

Pres.—L. M. Klauber, San Diego Consolidated Gas & Electric Co., San Diego, Calif.
Exec. Sec.—Clifford Johnstone, 447 Sutter St., San Francisco, Calif.
Conv., Coronado, Calif., Sept. 17-21, 1928.

Pennsylvania Gas Association

Pres.—Mark Pendleton, Pennsylvania Gas & Electric Co., York, Pa. Sec.-Tr.—Geo. L. Cullen, Harrisburg Gas Co., Harrisburg, 1929.

Southern Gas Association

Pres.—P. S. Arkwright, Georgia Power Co., Atlanta, Ga. Sec.-Tr.—J. P. Connolly, 141 Meeting St., Charleston, S. C. Conv., 1929.

Southwestern Public Service Association

Pres.—M. T. Walker, Southwestern G. & E. Co.,
Shreveport, La.

Chairman Gas Section—C. M. Thompson, Texas
Power & Light Co., Waco, Texas.

Sec.—E. N. Willis, 403 Slaughter Bldg.,
Dallas,
Texas.

Conv., Dallas, Texas, May 2 to 5, 1928.

The Public Utilities Association of Virginia

Pres.-J. W. Hancock, Roanoke, Va. Sec.-A. B. Tunis, 301 East Grace St., Richmond, Va. Conv.

Wisconsin Utilities Association

Pres.—John St. John, Madison Gas & Electric Co., Madison, Wis. Exec.-Sec.—J. N. Cadby, 432 Broadway, Milwaukee, Wis. Conv., 1928.

*Deceased.

Tenth Annual Convention of the American Gas Association Atlantic City, N. J. October 8-12, 1928

Annual Convention of the Natural Gas Department

Dallas, Texas May 7-10, 1928

Employment Bureau

(Address All Communications to Key Number)

SERVICES REQUIRED

SALESMEN—Well-known manufacturer of water heaters is in need of local representatives in several cities. The type of man wanted should be about 30 to 35 years of age, well educated, healthy, good business experience including direction of other employees. Reply, giving full qualifications, present connection and salary. Treated in confidence. Inclose photo if available. Address A. G. A.

Key No. 0107.

GAS RANGES SALESMAN to represent a Trade Mark Line of Gas Ranges and Broilers—both Domestic and Hotel Lines. One experienced and having some acquaintance with West Shore Gas Companies in Illinois and Wisconsin preferred. Address A. G. A.

Key No. 0111.

GAS SALES ENGINEER—Experienced in house

S SALES ENGINEER—Experienced in house heating. State in detail experience, age and salary desired. Address A. G. A.

GAS SALES ENGINEER—Experienced in house heating. State in detail experience, age and salary desired. Address A. G. A.

Key No. 0112.

WANTED—Live wire organization preferably, or an established individual to represent manufacturer of a new type—nationally advertised water heater. Full cooperation and generous commissions paid. Water heater is now completed and selling fast. Address A. G. A.

Key No. 0113.

PUBLIC UTILITY MEN—Due to rapid expansion, a large holding company with principal Accounting offices located in Central New York State has various desirable positions open. Public Utility Accounting experience essential. Applications must state age, experience, salary desired and when available. All applications will be treated in strictest confidence. Address A. G. A.

Key No. 0114.

SALESMEN WANTED—The manufacturer of a nationally advertised line of gas conversion burners desires the services of two high class men to travel in natural gas territory and contact gas companies, distributors and dealers; experience in furnaces, boilers or house heating systems desirable; good opportunity and remuneration tright men; replies treated confidentially; give complete details in your first letter. Address A. G. A.

Key No. 0115.

SERVICES WANTED by established manufacturers of Industrial Gas Appliances Resident representatives for new equipment highly interesting to all Industrial Gas Engineers. Address, A. G. A.

Key No. 0116.

GAS ENGINEER: Company manufacturing gas

Key No. 0116. GAS ENGINEER: GAS ENGINEER: Company manufacturing gas plant apparatus has an opening for a gas engineer. Must be familiar with water gas plant operation and apparatus. About 30 to 35 years of age. Give detailed experience and salary expected in applying. Address A. G. A.

Key No. 0117.

WANTED—Gas Sales Engineer experienced in application of gas, particularly in industrial processes. Address American Gas Association stating age, experience and salary desired.

Key No. 0118. Company manufacturing

SERVICES OFFERED

WANTED—Superintendent experienced in design and production gas ranges and heaters for new company in Southwest. Also need sales manager. Can acquire financial interest but not essential. State fully experience, qualifications and expected salary. Box Address A. G. A. salary.

Key No. 254.

WANTED—Position as Manager by man thoroughly capable of handling all departments of a Gas property. Good record in Public Relations, has also operated Electric Light & Power Plant. Address A. G. A.

Key No. 255.

Address A. G. A.

Key No. 255.

EXPERIENCED—"Employee and Public Relations
Man." Well grounded in knowledge of public
utility organization business. Deeply interested
and specially experienced in all work pertaining
to public and employee relations work. Capable
of executive position of responsibility. Address
A. G. A.

Key No. 256.

SPECIAL UTILITY ENGINEER-Revamping, con SPECIAL UTILITY ENGINEER—Revamping, construction or development work; with large operation or holding company preferred. Age 45. Eaperience 27 years as superintendent, engineer and manager of moderate growing systems; Kopper coke plants and waning natural gas. All kinds distribution. Also combustion specialities business. Would consider short term Foreign commission. Address A. G. A. Key No. 242.

AGGRESSIVE MANAGER or General Superintenent, 25 years in the industry, familiar with branches of operation and construction. Best references. Available now. Address A. G. A. Key No. 246.

ASSISTANT TO EXECUTIVE: Married, 37 years old, secretary to well-known executive in New England company wishes similar position is medium size company. Anywhere. Best of references. Reason for change, reorganization of management. Address A. G. A. Key No. 247.

Rey No. 247.

POSITION WANTED—Auditor or Office Manager,
Middle West preferred. Sixteen years' experience
in local and general offices; coal and water gas
accounting; coke distribution; rate promotion;
mechanical bookkeeping systems; all phases of
commercial department, city and suburban territory. Married. Age 38. Excellent health and
splendid personality. Address A, G, A,
Key No. 248.

Key No. 248.

WANTED-Position as manager of small progressive cas company in a growing community by technology and company in a growing community by technology. NNIED-Position as manager of small progressive gas company in a growing community by tech-nical graduate, 36 years old. Married. Twelve years' experience including water gas plant es-struction and operation, High- and Low-Pressur Distribution, including Meters and Regulators. Special emphasis on Public Relations work. Ad-dress A.C. dress A. G. A. Key No. 249.

GAS DISTRIBUTION FOREMAN desires to change S DISTRIBUTION FOREMAN desires to chass-his position. Experienced in laying mains and services on both high- and low-pressure, good man on governors, can weld pipe. Also consid-ered a first-class fitter on automatic, storage, tan-water heaters, house heating systems, and other appliances. Will start as fitter or welder it there chance for advancement. Address A. G. A.

Key No. 250.

POSITION WANTED as superintendent of distribution or manager of small property. Seven year
experience is distribution both high- and lowpressure systems. In charge of shop department
and meter repair shop for four years. Address and meter A. G. A. No. 251.

A. G. A.

Key No. 251.

SUPERINTENDENT of large gas works in East
desires to make change. Prefers similar position
under more pleasant surroundings, or general
supervision over a number of small plants. Address A. G. A.

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perience. Address A. G. A.

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AGENT—A man of broad sales experience and apquaintance in the gas industry and other trade
outlets of Southwest desires sales agency for line
of gas equipment in Texas and adjoining territory.

Address A. G. A.

Key No. 257. ss A. G. A.

Key No. 257.

AVAILABLE for Gas Company or Appliance Manufacturer. A man with wide experience in design, installation and utilization of domestic appliances Address A. G. A.

Key No. 258.

MAN now employed desires new loss.

Key No. 258.
TECHNICAL MAN now employed desires new location. 38 years of age. 16 years' experience is coal and water gas manufacture, sales and distribution; also one year's experience with a coal company sampling coal in mines, from cars and special research work. Address A. G. A.

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AMERICAN GAS ASSOCIATION, INC.

BEADQUARTERS, 430 LEXINGTON AVE., NEW TORK, N. T.

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